



APPLIED GRAPHENE
MATERIALS

PROUD TO BE A LEADING INNOVATOR

IN GRAPHENE DISPERSION
AND APPLICATION TECHNOLOGY

Applied Graphene Materials plc
Annual Report and Financial Statements 2021

AT THE FOREFRONT OF THE GRAPHENE INDUSTRY, LEADING THE WAY IN THE DEVELOPMENT AND APPLICATION OF NANOPLATELETS DISPERSIONS FOR CUSTOMERS IN THE COATINGS, CAR CARE, COMPOSITES AND FUNCTIONAL MATERIALS SECTORS.

We collaborate with our global partners sharing our experience, knowledge and expertise to enable them to benefit from the significant performance enhancements offered by our unique graphene based solutions in **REAL LIFE APPLICATIONS**.

FINANCIAL OVERVIEW

Revenue

£0.12m

2020: £0.08m

EBITDA*

£(3.15)m

2020: £(3.08)m

Loss before tax

£(3.56)m

2020: £(3.69)m

Basic EPS

(5.6)p

2020: (6.4)p

Adjusted EPS

(5.6)p

2020: (6.1)p

Cash at bank

£6.30m

2020: £3.68m

* EBITDA comprises earnings before interest, tax, exceptional costs, depreciation and amortisation.

WHY GRAPHENE?

As a disruptive technology, graphene has the potential to replace or enhance the performance of existing materials in a wide range of applications and sectors.



OUR PURPOSE

AGM aims to create value for all of its stakeholders, contribute to global knowledge on graphene application technology and play a leading role in the development of innovative graphene-enhanced new products that **stand out** in their respective markets.

→ **Our strategy**
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OUR MISSION

AGM aims to continue to **innovate** and be a technical leader in the application of graphene dispersions and to create commercially successful outcomes for our customers and our Company.

→ **Our business model**
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OUR VISION

AGM is focused on strengthening its position as a world leader in the development, production and supply of graphene dispersions, exploring the possibilities and pushing the boundaries of material **performance** to enable our customers to realise the true potential of sustainable graphene solutions.

→ **Our markets**
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HIGHLIGHTS

OPERATIONAL AND COMMERCIAL HIGHLIGHTS

40

Products available
to distributors
2020: 27

19

Launched
customer products
2020: 8

181

Projects in
sales pipeline
2020: 109

Coatings:

- Approval for use of a new graphene-enhanced primer with Blocksil, to complement use of its AGM graphene-enhanced Top Coat MT product launched to consumers in January 2020. This system is being used with Network Rail and RTE
- Strong customer uptake expected from products being developed with Stanvac and a leading floor coatings manufacturer
- New customer product launches:
 - Two new wax based car care products from EZ Car Care
 - Two new wax based car care products from Infinity Wax
 - Two new wax based car care products from Constellation Chemicals
 - Tru-Tension launched new detailing spray product
- AGM product launches:
 - A ground-breaking new range of eco-friendly graphene nanoplatelet dispersions that will enable paints, coatings and composite materials customers to improve the sustainability of their product formulations in response to growing market pressures
 - Launch of Innovation Accelerator programme
- Scale up validation is due to commence with the UK Environment Agency at sites in the UK whereby our formulated products will be tested on structure applications for environmental exposure. A longer-range environmental exposure plan has also been started with French environmental testing site, Institut de la Corrosion
- Growth in total pipeline engagements to 200 (2020: 117), including 19 completed developments (2020: 8), and resulting revenue potential to £3.7 million (2020: £3.6 million)

Composites and functional materials:

- Positive continuing progress with core composites customer
- Potential for TP300 product for thermal adhesive and heat-dissipation applications

Distribution:

- Further distributors added to enhance our regional presence in Turkey (Gobarr) and South Korea (ManHo Polymers) and growth of our customer-facing representation headcount to around 89 including AGM's direct sales team

Strategic highlights:

- Fundraise of £5.5 million (net) announced in January 2021 and successfully completed in February 2021, extending the Group's cash runway beyond 31 January 2023
- In partnership with the EU REACH Graphene Consortium, achieved ECHA accreditation for volume supply of graphene powder (up to 10 tonnes' volume), addressing a significant barrier to deployment at scale. Central regulatory workstream with EPA for USA market
- Green energy applications identified as a new area of opportunity for our platform dispersion and application technology with initial focus on hydrogen/battery applications
- Branding refresh completed together with new website and improved communications platform
- Continuing IP development
- Cross-trading of shares in USA on OTCQX Best Market in USA from July 2021

Post year end

- Four new customer product launches were announced on 20 September 2021 – one of which was before 31 July 2021 and is included in the numbers above
- Joined the Graphene Engineering and Innovation Centre (GEIC) at the University of Manchester as an associated Tier II Partner through the special conditions offered exclusively through The Graphene Council

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CUTTING-EDGE VISION AND INNOVATION IN GRAPHENE APPLICATION

Our combination of leading-edge manufacturing, technology, unique know-how and IP, along with a highly skilled workforce, provides us with a market-leading position within the graphene sector.

Why AGM?



Graphene dispersions

Our graphene nanoplatelet dispersions enhance the performance of industrial systems, enabling customers to create value-adding, innovative new protective coatings, car care products, composites and specialty materials.



Expertise

A decade of expertise within our technical team means we truly understand how graphene works, in order to develop dispersions that deliver outstanding performance benefits.



Sustainability and the environment

We take a responsible approach to support our employees, our local communities and the environment. We are committed to the process of continuous improvement in line with the UN Sustainability Development Goals.



Customer collaboration

Through close partnerships, AGM ensures an optimum dispersion of graphene nanoplatelets is achieved in each customer's formulation.



Industry leader

We're proud to be members of the British Coating Federation, the North East England Chamber of Commerce, The Graphene Council, the American Coatings Association, OCCA, NEPIC and the Nanotechnology Industries Association (NIA).



Why innovate with our graphene?

Smaller particle size

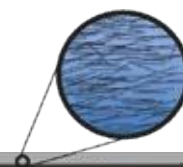
AGM's graphene nanoplatelets are approximately **3,000 times thinner** than a human hair!

Just **1g** contains more than **11,200,000,000,000** individual particles



Reduced water permeability

The addition of just **0.1%** graphene can increase a water particle's journey through a single coat of standard industrial paint by **120 times!**

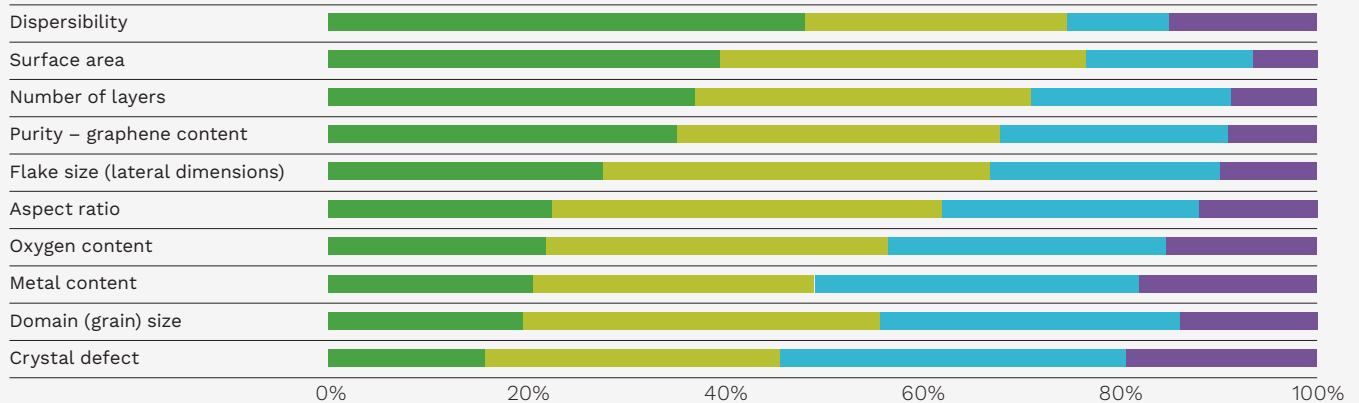


The importance of dispersions expertise

According to The Graphene Council research, the processing and handling of graphene is integral to achieving success in an application. The consistent supply of high quality, scalable graphene dispersions that are safe to handle and easy to incorporate is where AGM's expertise lies.

Deploying graphene nanoplatelets

● Essential ● Important ● Interesting ● Not needed

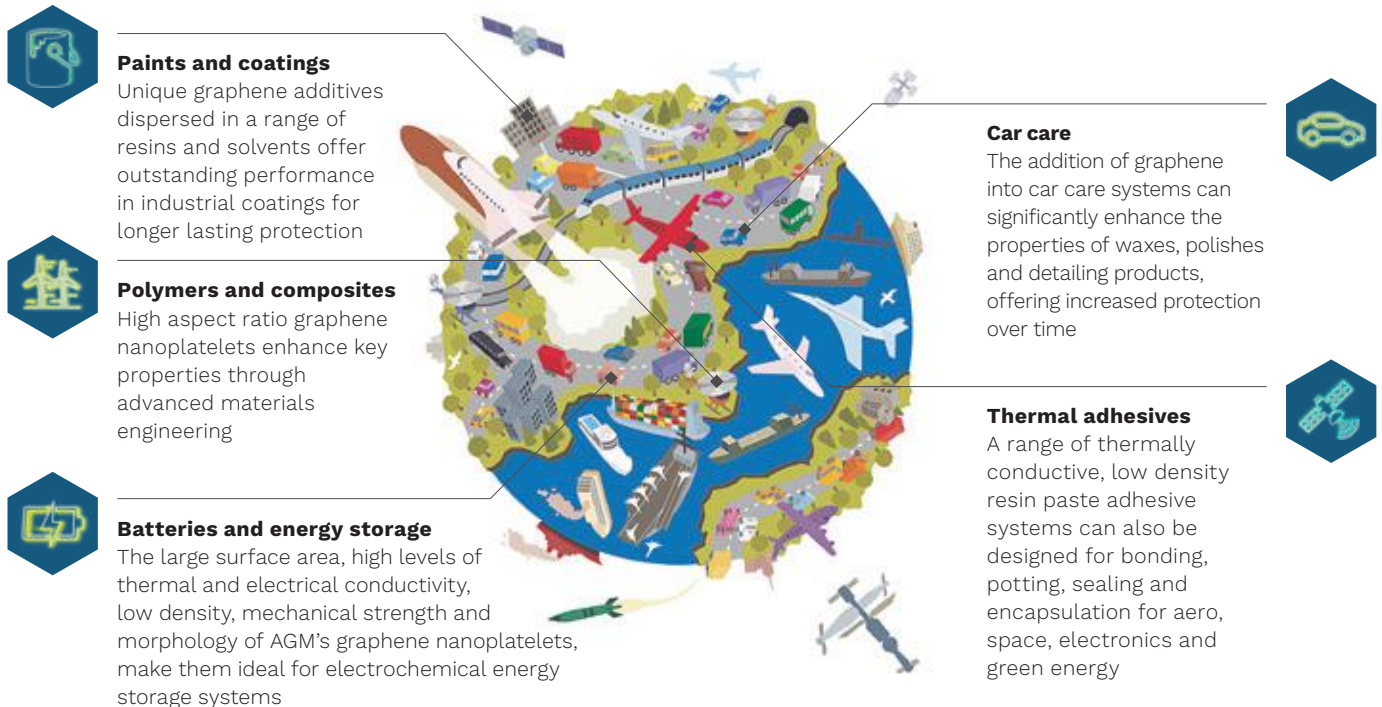


Courtesy The Graphene Council 4 January 2021 Survey on attribute importance.

Our key application areas

At AGM we are proud to be the industry-leading organisation that is truly harnessing the potential of graphene in products and materials through dispersions that are safe and easy to incorporate.

We enable innovators across a wide range of industries to enhance the performance of their new and existing industrial systems.



Sustainable applications

The reduction or replacement of traditional solvents is now a high priority across industries. Materials suppliers are being driven to invest in sustainable innovation as customers and their end consumers become increasingly aware of the safety and environmental impact of the raw materials they use.

The launch of AGM's **Genable 1700 Series** of eco-friendly graphene nanoplatelet dispersions will empower paints, coatings and composites manufacturers to improve the sustainability of their products without compromising on performance. The development reflects AGM's commitment to sustainability and continuous improvement to align with the principles of the UN Sustainable Development Goals, a framework which is integral to the environmental work of the global sectors in which it operates.





OUR PRODUCTS

The unique and exciting properties of graphene are well known, but the key to its successful adoption in real industrial systems is enabling its addition in a form that is not only easy and safe to handle but optimised to ensure the maximum performance levels of this potential game-changing material. AGM has developed an industry-leading technology position in the dispersion of graphene nanoplatelets.

The **Genable** products, utilising AGM's proprietary technology, comprising 39 individual user-friendly dispersions, are optimised for maximum performance...



Genable 1000 Series – comprising seven different dispersion products

An exciting range of graphene dispersions which offer coatings systems an uplift in barrier properties in synergy with other active ingredients.

Genable 1200 Series – comprising seven different dispersion products

A unique synthesised graphene type dispersed in a range of resins and solvents offering outstanding barrier properties and incredibly low loading levels in finished protective coatings systems.

Genable 1400 Series – comprising seven different dispersion products

An optimised range of cost-effective dispersions which offer excellent barrier performance across a wide range of applications.

NEW PRODUCT RANGE:

Genable 1700 Series – comprising twelve different dispersion products

An exciting range of eco-friendly, sustainable graphene nanoplatelet dispersions offering an environmentally friendly alternative.

Genable 2000 Series – comprising two different dispersion products

A range of unique dual action corrosion protection additives, offering both passivation and barrier performance for aluminium.

Genable 3000 Series – comprising two different dispersion products

A range of graphene based, active non-metallic anti-corrosion additives proven to offer industry-leading performance in even the harshest environments.

Genable 4000 Series – comprising two different dispersion products

A range of thermally conductive, low density resin paste adhesive systems designed for use for bonding, potting, sealing and encapsulation for aerospace, electronics and green energy applications.



A SELECTION OF CUSTOMER PRODUCTS WITH *Genable* INSIDE



Tru-Tension Graphene Bike Detailer

AGM's partnership with the leading innovator in the cycling market led to the launch of a graphene based spray to expand its range of bike maintenance solutions.



Constellation Chemicals Ceramic and Snow Sealants

The growing, dynamic car care innovator launched two new high performance detailing products enhanced with AGM's graphene nanoplatelet technology.

Following ongoing collaboration and relationship development, AGM's existing customers are now expanding their range of graphene-enhanced products.



Infinity Wax Graphene Wax

As a result of extensive evaluation and testing, the UK manufacturer launched a second graphene-fortified car care product in less than twelve months.



EZ Car Care Alloy Wheel Wax

After successfully launching its first graphene-enhanced wax last year, Halo Autocare's chemists continued working with AGM's technologists to launch a new wheel wax product.



Blocksil Primer

The launch of a graphene based primer to complement its Top Coat MT product completed Blocksil's fully integrated graphene coating system to combat corrosion.

INNOVATION ACCELERATOR PROGRAMME

Along with our *Genable* range of graphene dispersions, AGM continues to innovate directly with customers by offering bespoke solutions which are tailored to individual requirements. Through close collaboration AGM ensures an optimum dispersion of graphene nanoplatelets is achieved in each customer's formulation.

AGM customers have direct access to our technical expertise and extensive lab equipment for the evaluation and adoption of graphene into their system. Through our Innovation Accelerator we can share the development burden using our expanding testing facility, reducing the in-house lab time, eliminating costly commercial test houses and speeding up the time to market for their new products.





CHAIRMAN'S STATEMENT

WORLD-LEADING GRAPHENE DISPERSION TECHNOLOGY

We have made significant progress this year, despite COVID-19, and we are positioned to be world leaders in graphene dispersions in a range of applications. We are focused on executing new commercial agreements within our core sectors and expanding the use of our platform technology.



BRYAN DOBSON

Key points

- £5.5 million raised (net of expenses) extending cash runway beyond 31 January 2023
- Eco-friendly range of products launched
- Eleven customer products launched
- COVID-19 was a challenge but we managed it well
- Green energy applications identified as a new area of focus for our platform dispersion and application technology with initial focus on hydrogen and battery applications

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Introduction

I am pleased to present the Group's full year results for the year ended 31 July 2021. The last year has been one of disruption and uncertainty but we have come through it strongly. The lockdown and restrictions due to COVID-19 lasted much longer than initially anticipated and our revenue was impacted as our customers were unable to sell their products.

The new distributors that we appointed in 2020 have added significantly to our sales opportunity pipeline and we now have 19 launched customer products and 181 applications in the sales pipeline. Car care applications in particular have grown substantially.

Financial performance

The Group recorded an EBITDA loss of £3.1 million for the year (2020: loss of £3.1 million). Net cash was £6.3 million at 31 July 2021 (2020: £3.7 million). While the loss recorded is in line with the previous year, it continues to reflect the ongoing investment made in supporting our customer base as they incorporate graphene into their products and develop new applications.

In February 2021, we completed a fundraise totalling £5.5 million (net of costs) which extends our cash runway beyond 31 January 2023.



Financial review
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Highlights

The business has continued to gain further momentum in the year ended 31 July 2021, and since then, with highlights including:

- eleven new products launched by customers bringing the total to 19;
- 13 new products available through our distribution channels including the Innovation Accelerator Programme bringing the total to 40;
- 181 active projects in the sales pipeline;



The Board remains confident that the Group is ideally placed to achieve long term commercial success against its stated strategy given its IP, know-how, and increasing customer momentum. Our belief that we are becoming a global graphene market leader is stronger than ever and the Board sees Applied Graphene Materials as well placed to meet its ambitions.”

- two new distributors added during the year;
- achieved ECHA accreditation for volume supply of graphene powder (up to 10 tonnes’ volume);
- green energy applications identified as a new area of focus for our platform dispersion and application technology with initial focus on hydrogen/battery applications; and
- four new customer product launches were announced on 20 September 2021 – one of which was before 31 July 2021 and is included in the numbers above.

Our culture

It is essential that we bring together our employees’ diverse expertise and work together to meet our customers’ expectations. This collaborative approach sits at the heart of our culture.

As such, we view our employees as critical stakeholders. We remain committed to ensuring employees receive the required development and training opportunities to enable them to be at the forefront of the graphene market. We focused on safeguarding our employees during lockdown and have been able to safely continue our operations. We did not furlough any staff and we have encouraged flexible working in line with government guidance.

I am proud of the way that our employees have responded to the pandemic and I would like to thank them all for their efforts under such challenging conditions.

In every aspect of our business, we seek to operate in compliance with all laws and regulations and want our employees to work in a manner that is professional, ethical and open. Our employees are encouraged to report any activities in breach of these principles through the Group’s whistle blowing policy, which includes direct access to the Board’s Non-Executive Directors.

All of our stakeholders are very important to us and I would like to thank our suppliers and customers for their great support during this period. In particular I would like to thank our investors for their ongoing support and encouragement which was clearly demonstrated by the fundraise that we performed in early 2021.

Corporate governance

We continue to fully embrace the Quoted Companies Alliance Corporate Governance Code. Further details regarding our approach to corporate governance are detailed within the Governance report on pages 44 to 48.

Sustainability

We take our responsibility to all stakeholders including employees, shareholders, distributors, customers, suppliers and the wider community extremely seriously. We recognise that a focused and balanced approach to sustainability will ultimately benefit all stakeholders and the Group alike.

This is evidenced by the continued work we have done this year on the ongoing EU REACH programme, where we provide technical input on the evaluation and assessment of the safe use of graphene in industrial applications. This long period of work resulted in ECHA granting approval for a volume threshold of 1 to 10 tonnes of powder usage per annum of graphene products supplied by individual members of the Graphene REACH registration consortium, of which AGM is a founding member. We continue our commitment to regulatory approvals in other territories.

During July 2021 we launched a ground-breaking new range of eco-friendly graphene nanoplatelet dispersions that will enable paints, coatings and composite materials customers to improve the sustainability of their product formulations in response to growing market pressures.

We have also developed an internal action plan to address certain aspects of ESG best practice over the next twelve months.

Board changes

Mike Townsend resigned as a Non-Executive Director during the year. Mike has been a member of the Board since 2014 and the Board thanks him for his contribution to the business.

Strategy and outlook

Through sound technical data, we have demonstrated that we have real applications of graphene which satisfy customer needs in the marketplace. We believe that we have positioned the Group so that it can commercially exploit the technology developed to date.

We have a very strong range of products and applications in the coatings sector as well as in adjacent markets where our platform technology can be applied. We are now at an inflection point as we can expand our research and development activities into other areas. We have identified hydrogen storage and battery applications as a market with significant potential for graphene application and we already have projects underway. This is very exciting and I look forward to reporting on our progress in future years.

The Board remains confident that the Group is ideally placed to achieve long term commercial success against its stated strategy given its IP, know-how, and increasing customer momentum. Our belief that we are becoming a global graphene market leader is stronger than ever and the Board sees Applied Graphene Materials as well placed to meet its ambitions.

Bryan Dobson
Chairman

12 October 2021



CHIEF EXECUTIVE OFFICER'S REVIEW

TRANSFORMING MATERIALS WITH GRAPHENE

Solid foundation of Innovative products and strong distribution channels make AGM ready to perform for commercial growth. Our distinctiveness through our graphene dispersion technology makes us stand-out in the graphene sector offering product and technology solutions that demonstrate the remarkable utility of graphene nanoplatelets.



ADRIAN POTTS

Key points

- Substantial technology development progress
- Sales growth of 48% year on year
- Eleven new customer product launches, eight of which were in Car Care
- Significant growth in number of opportunities in sales pipeline
- Water-based and eco-friendly product range launched
- Focus on green energy markets

2021 overview

AGM has made clear progress this year with both increased levels of customer engagement and technology development, despite the ongoing challenges related to COVID-19. While managing these difficulties, we have launched new and exciting AGM products that offer customers in our core markets a sustainability advantage, and we have seen a promising number of new customer products coming to market. To realise the real benefits of graphene in a finished product, users have to utilise a well dispersed form of graphene. Therefore, our success is firmly based on our dispersion technology and application know-how.

In combination with our own direct sales approach, AGM's distribution partners have increased their customer engagements. This has been supported by AGM's ability to offer standard dispersed products. Two further distributors were added in the period, and we expect to engage further partners in new territories.

The expertise of our global network of distributors is aligned to our core market: The protective coatings sector is where much of our current activity is centred. New nanomaterials introduced to this sector need to demonstrate that they are safe, consistent and easy to integrate. We are therefore focused on proving that our dispersion technology works by backing it up with solid data. Our developed dispersion product offerings also read-across well to other sectors, where liquid-based dispersions are routinely used for the integration of additives.

We have seen particularly strong progress in the car care sub-sector of protective coatings with eight new products introduced to the market since our last annual report. This innovative, fast moving market represents a good long term revenue development opportunity and we anticipate further customer product launches, based on positive testing momentum. Progress within the more traditional Protective Paints and Coatings sector is positive, though the cycle to integrate, test, optimise and approve is inherently longer. Two new anti-corrosion primer products were brought to market by customers.

Network Rail equipment refurbishment

The introduction of a new primer product by Blocksil to complement their Top Coat MT product. This system is being used to good effect on refurbishment of UK Network Rail trackside enclosures. Expectation is for this product to significantly increase in volume, along with their Top Coat MT with post-COVID-19 business volume recovery with Blocksil.



Stanvac (India) power transmission coatings

Stanvac is a new customer win with the development of a coatings application combining electrical conductivity with barrier protection. This Indian customer is in the final stages of customer field trials with their product and it is anticipated that volume demand for graphene dispersions will ensue upon finalisation of their customer approvals.

We have continued to develop our technology platform, focusing on the successful adoption of graphene dispersions in coatings, with good read across into other sectors such as composites, adhesives and inks. We are now well-equipped with a broad platform of dispersion products that incorporate both synthesised and exfoliated graphenes. We provide background guidance on their use and supporting data in exemplar formulations for a broad spectrum of applications, from mid to heavy corrosion environments, chemical resistance applications and beyond.

We continue our committed focus on developing regulatory approval for our products in parallel with development activity and integration of new distribution partners. We believe that by producing dispersions we help to manage the safe handling of nanomaterials, during both customer formulating and product manufacture through to management of disposal of product.

Efforts are continuing apace to add further to our IP portfolio. We are committed to further increasing our dispersion manufacturing capacity to meet anticipated demand resulting from successful sales of our customers' products. We have put significant effort into the development of dispersions to extend our product scope to now include exfoliated graphene products.

Having become leaders in the dispersion of a broad range of graphene types, we are in a strong position to extrapolate our coatings and dispersions technology platform further. Key areas we are now focused on further developing are thermal conductive materials for battery technologies and dispersions for use in batteries, to support demand from the growing EV industry, along with addressing a number of potential applications for graphene in hydrogen power.

Sustainability is emphasised with our external product offerings, in particular addressing alternative dispersion media to reduce Volatile Organic Compounds (VOC) and graphene additives to potentially reduce toxic materials in a range of applications including coatings, composites and car care consumer products. We launched a new and exciting eco-friendly product range in the year which will build upon our water-based dispersions offering. The addition of graphene also offers the opportunity to enhance product life cycles, which is attractive for customers looking to improve the long term sustainability of their products.

Commercial progress

General

AGM's sector-leading innovation in both graphene nanoplatelet dispersion and application know-how enable us to drive forward our commercial engagement. Our expertise has substantially expanded to include exfoliated graphene products. AGM offers the missing pieces of the end-to-end challenge often found when seeking to use graphene nanoplatelets, namely:

- know-how on the challenge of correctly dispersing graphene nanoplatelets;
- practical, innovative additive solutions;
- application know-how – proven performance gains in real exemplar systems backed with practical data and use advice;
- working with both synthesised and exfoliated products; and
- ability to walk with the customer through their integration using a range of work packages as appropriate to need. Paid-for Innovation Accelerator packages are also available to customers to fast-track development.

Our approach enables a greater potential for successful outcomes and avoids the disappointment around the great possibilities with graphene not being fully realised due to poor execution, lack of know-how, or Environmental Health and Safety (EHS) concerns. Standardising our dispersed product range has been a key focus to afford end-users a reliable, repeatable product range. 74% of product shipped in the year was from our standard product range. Where customers have more challenging formulating applications to resolve, our dispersion know-how to determine the most appropriate graphene and dispersion formulation for a particular end-use is outstanding. As such, we also work with customers to provide customised dispersions to suit their needs.

For distributors, having a standard easy-and-safe to use product portfolio is important to enable them to develop solid traction in engagement with our products with confidence. The number of pipeline opportunities has grown accordingly, with distributors handling routine enquires about our products and deploying good levels of technical support.



CHIEF EXECUTIVE OFFICER'S REVIEW CONTINUED

Pipeline overview

Increased customer activity is reflected in our pipeline of development opportunities. We have seen positive growth in the overall numbers of customers who have taken product to evaluate in the period from 109 to 181.

Positive progress has been made, particularly with our distribution partners who have proved effective in engaging with customer opportunities, offering AGM's dispersed graphene product range. This has, of course, taken time to establish, but the results reflect positive momentum with this conduit to market – approximately 41% of engagements are now being handled by distributors. AGM's distributors for the most part operate within the supply chain for coatings, and this represents good alignment with our strategic approach to maximise traction in this sector. As well as working closely with individual customers to introduce graphene dispersions, our distributor engagements are followed through with strong Technical Support to ensure the correct technical solution is achieved with those customers. This, in turn, is anticipated to lead to product launches by our collective customers and volume demand for our dispersed products.

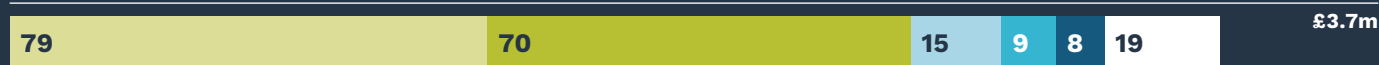
As at 31 July 2021, this was as below:

Sales opportunities (number)

As at 31.07.21

Total: 200

Weighted sales value



As at 31.07.20

Total: 117



As at 31.07.19

Total: 97



Sales opportunities at 31.07.21 by product and development stage (number)

Car care

Total: 47



Functional materials

Total: 15



Composites

Total: 13



Coatings

Total: 125



Development stages

- | | |
|--|---|
| 1 Agreement on scope of sampling and engagement | 4 Final product trials, formulation and specification |
| 2 Initial testing and interpretation of results | 5 Final commercial agreement |
| 3 Repeat testing for consistency and review of results | Launched |

Commercial progress continued

General continued

Revenue for the year at £123,000 showed a positive upwards trend compared to the prior two years, though remained modest due to ongoing customer engagement delays due to COVID-19.

With activity with our customers constrained, we have focused on driving in-house technical developments through our technology group. Our expertise in dispersing our own synthesised graphenes has now been fully applied to other exfoliated products to enable a broader applicability of graphene nanoplatelets of various forms. As such, we are confidently able to offer a breadth of products using both synthesised and exfoliated graphenes to suit the end application and customer need.

Addressing the customer need for a more eco-friendly and sustainable approach to product formulating, we have also recently developed and launched a new product range which encompasses bio-based, eco-friendly and zero VOC solvent systems. This range of materials is designed to help the formulator utilise the benefits of graphene materials, but within the context of using a platform of eco-friendly resins and solvents. With this new **Genable 1700** product range to complement our established water-based dispersions products, these represent an excellent platform technology to enable formulator flexibility where demand for sustainable solutions is prevalent.

AGM's core market continues to be the protective coatings sectors, where graphene nanoplatelet technology in the correct dispersions format has the potential to create higher performance products with higher added value for the customer. Long range testing in support of the protective coatings sector continues to be a core theme of our technology development activity, with good progress being made in exemplar applications testing for chemical resistance for flooring, chemical transport and storage applications through to harsh corrosion environments typified in offshore installations. The know-how which goes with this development activity is invaluable in guiding customer integration of our nanoplatelets dispersions to excellent effect. We use this platform dispersion technology to good effect to read across to sectors such as composites and other liquid matrix products.

AGM's future revenue prospects firmly sit with volume uptake of our customers' products which contain our graphene dispersions. Once launched and established, we expect to achieve consistent repeat order volumes for dispersions for use in a growing number of launched products. Our route to sustained revenue growth is through continuous customer-facing development to enable new end-users to both realise the performance benefits of graphene dispersions in their products, and to do it in a safe and effective manner. As such, our efforts in regulatory approval for our graphene dispersions have become a central workstream, running in parallel with (rather than trailing) technology development programmes.

Revenues in the twelve months were generated from three key application areas: Protective coatings, Composites including Elastomers and Car Care. The impact of COVID-19 was, we believe, significant in terms of take-up rate and volumes, and the impact on development efforts in customer facilities. With a solid recovery in the coatings industry anticipated and improving projections for composites activity, we anticipate progressive revenue growth in our core sectors.

Distribution

AGM announced the following Distributor appointments in the twelve month period ended 31 July 2021:

- Gobarr (Turkey); and
- ManHo Polymer (South Korea).

These additions give AGM improved regional coverage. Our next target areas for representation development are in South America and India, with announcements anticipated in due course. We believe that we have the correct strategy to work through technically capable distributors with a range of well supported innovative standard dispersion products. Objectives for what has been the first year for many of these partners have been broadly met and we look forward to acceleration of engagement in the future.



James Briggs Limited

Dispersion volume run rate has been steady to supply their range of aerosol-based graphene coatings, including white-label products. The development of further product applications is anticipated to yield a broader set of products in the aerosol coatings space.



Chemical resistant flooring

Positive progress with a leading floor coatings manufacturer in the field of protective barrier floor coatings for concrete using the well-defined barrier performance attributes of graphene nanoplatelets. We anticipate strong uptake of this product once launched to market.



CHIEF EXECUTIVE OFFICER'S REVIEW CONTINUED



PROTECTIVE COATINGS SECTOR

Our core focus has been the combination of developing robust dispersion products which will enable liquid system-based end-users to deploy our products easily, consistently, and safely to good effect. The protective coatings sector is our strategic focus whereby:

- We have developed a broad dispersion technology suitable for the industry with good read across to liquid-formulation adjacencies such as composites, inks, elastomers etc.
- We have demonstrated the practical utility of graphene nanoplatelets in starting point formulations to excellent effect.
- We have developed compelling data to demonstrate the performance advantages that graphene can achieve in a well-formulated coatings system to demonstrate that graphene works.
- We have generated solid, practical guidance for customers to help them integrate our dispersion additives into their coatings formulations.
- We actively use the coatings sector experience to read across to other potentials.

Key performance gains have been demonstrated for barrier and anti-corrosion performance in coatings through the introduction of graphene nanoplatelet materials via a dispersed product format. AGM goes the extra mile to use exemplar starting formulations to test and demonstrate the utility of graphene used in practical coatings solutions. Through the past twelve months, we have completed work to further demonstrate graphene's potential in increasingly harsh coatings application areas.

Highlights of key customer engagements within the Protective Coatings sector with a focus on anti-corrosion benefits are as follows:

- The introduction of a new primer product by Blocksil to complement their Top Coat MT product. This system is being used to good effect on refurbishment of UK Network Rail trackside enclosures. Expectation is for this product to significantly increase in volume, along with their Top Coat MT with post-COVID-19 business volume recovery with Blocksil. Activity with RTE antennae has begun RTE antennae has begun with coatings applications completed on three structures.
- Development of Teal & Mackrill's graphene enhanced primer is progressing, focus has now turned to completing the external certification for this product.
- James Briggs Limited – dispersion volume run rate has been steady to supply their range of aerosol-based graphene coatings, including white-label products. The development of further product applications is anticipated to yield a broader set of products in the aerosol coatings space.

- Stanvac is a new customer win with the development of a coatings application combining electrical conductivity with barrier protection. This Indian customer is in the final stages of customer field trials with their product and it is anticipated that volume demand for graphene dispersions will ensue upon finalisation of their customer approvals.
- Positive progress with a leading floor coatings manufacturer in the field of protective barrier floor coatings for concrete using the well-defined barrier performance attributes of graphene nanoplatelets. We anticipate strong uptake of this product once launched to market.
- The successful development of an aluminium anti-corrosion coating system at a coatings customer.
- The launch of AGM's innovative **Genable** 1700 eco-friendly product range to service sustainability objectives with our customers.
- We also anticipate launch of an exemplar finished epoxy primer formulation for use with customers who wish to fast-track potential of a graphene enhanced product. Work is completed in this area and product is available as an option as part of the customer engagement process.



Key performance gains have been demonstrated for barrier and anti-corrosion performance in coatings through the introduction of graphene nanoplatelet materials via a dispersed product format. AGM goes the extra mile to use exemplar starting formulations to test and demonstrate the utility of graphene used in practical coatings solutions.”





CAR CARE

Customer engagements continue apace in this sector with a strong focus on water-based and specific solvent-based dispersions to suit typical detailing and wax product formats. AGM has a strong product portfolio suited to this sector. In car care products, graphene offers performance benefits such as UV protection, corrosion protection and changes to water shedding, leading to longer lasting aesthetics.

Six customer products containing our graphene dispersions have been announced as launched in this sector in the period, including Infinity Wax QDX detailing and car wax products, Halo Autocare wheel wax product, two car care products from Constellation Chemicals and a bike detailer from Tru-Tension. Four product launches have also been announced post-period, with three products from one customer and one product from another client which was launched before 31 July 2021. Pipeline engagements in this sector are strong and we anticipate several further customer product launches soon with a number of customers in the final stages of product testing.



Customer engagements continue apace in this sector with a strong focus on water-based and specific solvent-based dispersions to suit typical detailing and wax product formats. AGM has a strong product portfolio suited to this sector. In car care products, graphene offers performance benefits such as UV protection, corrosion protection and changes to water shedding, leading to longer lasting aesthetics.”



Our business model
Page 18

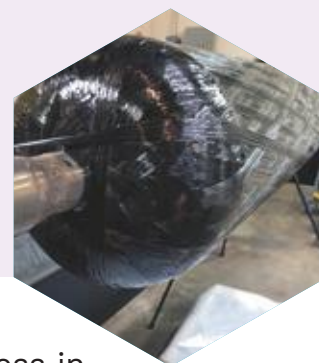


COMPOSITE MATERIALS

Positive progress has been made with materials supply to Infinite Composites Technologies for their manufacturing and development of innovative Type V linerless pressure vessels for launch vehicle and satellite applications, fulfilling various funded project requirements. It is very pleasing to also note that ICT has increased demand for pressure tanks for a number of new projects in the areas of racecar applications and additional projects for hypersonic and hydrogen-powered aircraft. This represents an important diversification into new areas for hydrogen technologies and propulsion applications. With the emerging opportunity in hydrogen technology and pressure vessels forming an integral part of this, we see solid opportunities in the area of graphene-enhanced composites pressure vessels in tandem with ICT's innovative technologies.

Modest sales of graphene dispersions were made to SHD Composites to feed their prepreg manufacturing demand for their MTC9810 product. As reported last year, output from the NEAT project has progressed, although much slower than anticipated due to limited resources to complete the work at the customer. We await feedback from the customer in due course. We continue to develop data to support customer development through a test programme with The Graphene Council through the University of Maine's Advanced Structures and Composites Centre. Composite materials evaluation is also progressing with other composites customers using our graphene dispersions.

We anticipate continuing supply to an unnamed elastomer-based customer where our water-based graphene dispersions are used to good effect for enhanced product performance.



Positive progress in composite pressure vessels for hydrogen.”



Our business model
Page 18



CHIEF EXECUTIVE OFFICER'S REVIEW CONTINUED



FUNCTIONAL PRODUCTS

Thermal paste adhesive activity has been progressing with a customer for aerospace applications. The product is reported to fulfil the requirements of low-density and high thermal conductivity in an adhesive format and is reported to be close to completion of approval for use.

Ink products containing graphene nanoplatelets have been used previously to focus on a specific mechanical application in composites. We have broadened the platform for such inks and are now focused on formats we have developed for printable conductives as a new potential revenue stream.

Technology, regulatory and manufacturing status**Technology**

To further enhance customer service capabilities and technology development activities, we are in the process of integrating coatings spray booth capabilities on site. A grant to support this effort was secured from Tees Valley, for which AGM is highly appreciative.

Progress with our protective coatings platform technology workstream has been extensive. Our development cycle has successfully enabled us to increase our support for customers seeking to engage with graphene in their product innovation. We have excellent solutions to meet the need for solvent based coatings formulations requiring enhanced corrosion and barrier performance across a broad spectrum of applications. This includes general industrial applications in the C3 category through to heavy corrosion applications under C4, C5 and even CX ratings. The in-house work to not just develop dispersions suitable for such formulations but to demonstrate these with practical testing and data generation sets AGM apart in this field.

Chemical resistance testing has resulted in exciting potential for graphenes in an expanded portfolio of protective coatings applications including floor coatings, chemical transport applications and storage application coatings. We look forward to further customer engagement in this field following the generation of supportive test data for a range of applications.

Effort to tackle the challenges of dispersing 2D high aspect ratio materials into water-based additives have been addressed and we have products to meet sustainability objectives. We have further extended this with our eco-friendly product launch. Further work has successfully continued to develop improvements in the area of coatings adhesion when using water-based systems with graphene additions.

Work continues to benchmark a range of graphene nanoplatelets against other commonly used additives in the coatings industry. A high % use of conventional additives such as glass flake can be effectively replaced with very low % loadings of graphene, leading to formulator flexibility and in some cases, coating cost reduction. Investigative efforts

also continue in the use of hybrid blends of graphenes to optimise performance in coatings applications. It is testament to our formulating capabilities that we are now able to offer combinations of products in custom dispersions to suit a broad spectrum of end-use opportunities. We anticipate several further product launches around these various subjects with a view to maximising the revenue opportunity with each customer's potential in the sector.

To further back up the data we generate from accelerated testing, we are now committed to proof of effectiveness in real world testing in several applications. Scale up testing is due to commence with the UK Environment Agency at sites in the Northeast of UK whereby our formulated products will be tested on structures for longer term environmental exposure. A longer-range environment test plan has also been started with French environmental site, Institut de la Corrosion. We also have primers being actively tested in a freshwater environment on the steel hull of a narrowboat. All of this combined activity is foundational to prove that our technology solutions provide real, sustainable opportunities for AGM's graphene products to be confidently adopted.

Good progress has been made in the formulating and printing demonstration of conductive inks. These materials have a range of application from textiles to composites and beyond. Useful levels of electrical conductivity have been achieved on a consistent basis and I am pleased with progress in this area. I look forward to further exploitation of this potential.

A programme of work is ongoing with experts at Grafine Ltd, based at the Graphene Engineering Innovation Centre at the University of Manchester, to develop textile coating applications using graphene for a range of end-uses. Harnessing the properties of graphene for coating barrier performance is anticipated as the major gain in this area, although other properties such as abrasion resistance (durability), thermal conductivity and electrical conductivity are also attractive attributes of graphene which may contribute to future textile performance.

Regarding dissemination of data, our ability to attend technical conferences has been badly impacted in the twelve month period due to event cancellations. Technical presentations on our innovative coatings technologies were made to the American Coatings Association conference 2021 covering Innovative water-based solutions for coatings and to the European Coatings Show conference 2021 with a presentation on the enhanced performance of CX high corrosion environment coatings.

Regulatory

As reported in January 2021, Regulatory approval was granted for up to 10 tonnes of graphene powder for each of the REACH Consortium partners. This represented a major step forward for the regulatory adoption of graphene as a material in the EU. Effort continues to progress the UK equivalent post-Brexit.

Considerable effort has been and continues to be spent to pursue securing regulatory approval in the USA through the Environmental Protection Agency (EPA). Our initial objective has been the regulatory approval of our AGNP-35 product, using a low volume exemption approach. Work continues in this area with ongoing dialogue with the EPA with the aim of securing a volume commercial position to service our customers keen to work with our synthesised graphene. In the meantime, we are progressing US engagements with accepted products. Approvals in other regions are being approached as we expand our distributor base.

AGM also announced through the year that we had joined the NanoTechnology Industries Association (NIA) to further assist in regulatory matter related to the volume adoption of nanomaterials technologies. We also continue with supporting dialogue through The Graphene Council who are strongly supporting positive progress in the area of regulatory acceptance of graphene nanoplatelets for commercial volume activity.

IP

Our efforts continue in this area to add IP value to the business. Patent activity in the period has included good progress on a number of our patent applications and dealing with examiner questions and comments. Trademark approval for the **Genable** brand was granted in Canada, China, Japan, Republic of Korea and Turkey.

Manufacturing

Our volume capacity programme has been fully focused on the development of dispersion methodologies, to both expand scale and accommodate the integration of exfoliated graphene materials into our dispersion products range.

With the clear appreciation that “graphene nanoplatelets” are not a single material and have diverse characteristics, each type of material demands significant and separate attention to detail in integrating it into useful media. Considerable time has been spent developing stabilised, repeatable quality dispersions with A-GNP45 exfoliated product. We have been particularly successful in this area, as recognised with our **Genable** 1400 product range, and latterly the development of our **Genable** 1700 eco-friendly product family. The latter product set incorporates both A-GNP35 synthesised graphene and A-GNP45 exfoliated product, to provide maximum flexibility and broad reach for customer selection. It is a testament to our technology team that both types of manufactured graphenes are now

offered as standard product dispersions through our sales conduit. Further work continues to bring other suppliers into the mix.

Further planned phased development of the dispersions capacity is currently ongoing to enable meeting the anticipated future needs of our customers for the next 24 months. This step by step approach enables us to maximise potential revenue whilst managing cash resources effectively.

Technology roadmap

As technology leaders in the development and application of graphene nanoplatelet dispersions, our roadmap for further innovation with graphene is anticipated to develop in a number of areas as follows:

- Continued development of our strategically central protective coatings technology platform in key identified areas of opportunity. This will continue the theme of appropriately formatting graphene nanoplatelets in fit-for-purpose dispersions which are able to serve the needs of emerging opportunities as well as enabling read-across to other adjacencies.
- Completion of work in elastomeric coating technology followed by direct product offerings.
- Sustainability project evaluating graphene in erosion coatings with focus on wind energy applications in collaboration with Northumbria University.
- A focus on battery technology in key areas:
 - Extrapolation of development of our excellent thermally conductive products to meet the specific needs of heat dissipation with lithium-ion batteries and beyond.
 - Working with Universities, development of graphene based battery solutions (in the area of Lithium Titanate and Silicon Lithium solutions).
 - Activity at Warwick Manufacturing Group (WMG) on dielectric materials.
- Development of graphene materials applications for hydrogen fuel cell technology to meet the anticipated growth in this technology as it matures.
- Extrapolation of use of graphene in composite pressure tank applications for storage of liquid-phase hydrogen. Anticipated need for pressure vessels is high and we see good opportunity in this area to develop composites integrating graphene.



Our markets
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CHIEF EXECUTIVE OFFICER'S REVIEW CONTINUED

Engagement with the GEIC

Following our recent announcement, it is clear that AGM has enabling technology and capability to offer graphene end-users who are keen to understand the practical mechanisms for successfully deploying graphene nanoplatelets in protective coatings, car care products, composite matrix systems, elastomers, inks and other matrices. We now believe that having spent time aggressively developing our technology platform to a suitable technology readiness level, the time is right to join the substantive activity with the Graphene Engineering and Innovation Centre (GEIC) in Manchester, UK.

AGM has joined the GEIC at the University of Manchester as an associated Tier II Partner through the special conditions offered exclusively through The Graphene Council (TGC), and we look forward to further accelerated engagement and to the positive benefits of being part of the larger graphene community in UK.

Sustainability

The review of the positive benefits that graphene addition can bring to product life cycle benefits remains central to our efforts in pursuing sustainable technology offerings for the protective coatings industry. The use of graphene to enhance barrier performance, achieve improved anti-corrosion capabilities, extend the life of coatings and reduce the asset maintenance schedule and use of replacement coatings is, we believe, a powerful sustainability offering. We believe this will be realised by the protective coatings industry as pace gathers for the increase in water-based technology, the reduction of VOCs and the push for more sustainable materials technologies on a global basis.

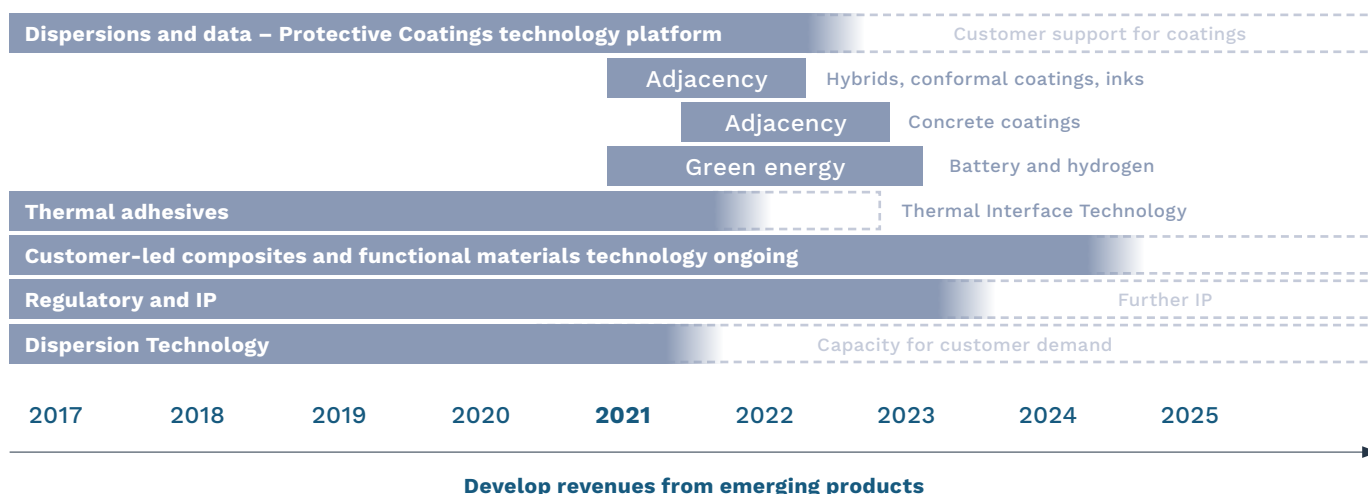
Demonstration of graphene as a material that really works in this space through progressive customer product launches is also a key metric for our success and promotion of graphene as a positive solution in the industry.

Water-based dispersions using a range of graphene types are available to meet the needs of the sustainability objectives of a number of customers and potential future engagements. Our recently launched eco-friendly dispersions range further enhances the opportunity to introduce sustainable products into formulating efforts in the form of bio-based resins, solvent free resins, low VOC solvents and VOC exempt materials.

Our review of our ESG standards and approach to sustainability continues both with our product development and in-house operations.

A key area of focus for us is in servicing our customers with the best quality of service possible as well as meeting the sustainability expectations that they have of their supply chain. The in-housing of packing and dispatch functions will also enable better control of process and also affords the opportunity to employ full use of recycled product packaging. We anticipate this change will be completed in the next six months.

Further initiatives are planned to limit our carbon footprint, as we measure and determine the best opportunities for progress to be made. This is anticipated to include our suppliers as well as in-house activity. We have a continued push to update our employment policies and train our staff in developing awareness.

Research and development



The commercial pipeline of engagements is strong and growing, representing many customers evaluating our products at various stages of development. This gives the Board confidence that AGM is well positioned with a combination of technical excellence, product portfolio, cash position and commercial approach to meet our ambitions of successful revenue growth and enterprise value in the coming year.”

Update on COVID-19 impact

Throughout the fiscal year, we have maintained best working practices within the AGM facility to ensure all staff continue to be kept as safe as possible. In line with the impact on the chemicals industry and the coatings industry, we have seen markedly slower than desirable activity levels with customers. This has been seen in two key areas; firstly a reduction in overall development activity within customer organisations which has inevitably delayed progress on evaluation of our products and secondly continuing limited access to assets for coating application. This has, in turn, led to a slower development of customer products containing our graphene materials and slower commercialisation of customer products already launched. With a slow but progressive recovery in the industry, we anticipate growing pace in the use of our products going forwards – both in testing them and in using them.

I would like to record my thanks to all our staff for their diligence in working through the more restricted working practices than anyone would normally like and for dealing respectfully with colleagues on site to minimise the COVID-19 risk to our business.

Cash position

Cash used in operations during the year totalled £3,019,000 and was £446,000 lower than the prior year. We received a further R&D tax credit in the year of £461,000 (2020: £1,316,000). In February 2021 AGM successfully completed a further fundraising of £5.5 million net of costs to further support ongoing working capital requirements in pursuit of commercial development of the business.

The Board would like to note its thanks to all investors in our business for their outstanding level of continuing support. As covered in the Financial review, our non-discretionary cash requirements indicate that the Group currently has sufficient cash resources for the next twelve months and beyond 31 January 2023. This includes consideration of the uncertainties related to revenue development delays because of the COVID-19 pandemic.

Outlook

AGM is in solid shape as we look to accelerate revenue growth arising from developing demand for customer products which contain our graphene dispersions. The effort that has gone in to establishing our solid technology foundation is exemplary and our **Genable** product range has been expanded accordingly. The number of customer product launches following evaluation and integration of our products has increased in the year as a result. We have further expanded the scope for customers to have a choice when they look at graphene as a potential materials solution by using traditional dispersion media or innovative, sustainable product offerings. We are expanding our dispersion manufacturing capacity to meet the ongoing expected volumes from our customer engagements. I am particularly pleased with the effort to integrate exfoliated graphene materials into our product range to provide broader scope in materials selection for customers to consider.

We continue the important work to achieve regulatory approval for this class of nanomaterials and see this commitment as essential to customer volume increases in the medium and long term.

Our distributor platform is doing well representing AGM and our product range, and we have seen a positive increase in activity. We anticipate solid growth in the coming year whilst supporting our partners well with high levels of technical advice and guidance on product use.

We are very excited about the opportunities in hydrogen and battery applications as both these emerging markets could be very large and we see strong potential for the application of our graphene products in these areas.

The commercial pipeline of engagements is strong and growing, representing many customers evaluating our products at various stages of development. This gives the Board confidence that AGM is well positioned with a combination of technical excellence, product portfolio, cash position and commercial approach to meet our ambitions of successful revenue growth and enterprise value in the coming year.

Adrian Potts
Chief Executive Officer
12 October 2021



OUR BUSINESS MODEL

INNOVATE. PERFORM. STAND OUT.

OUR KEY RELATIONSHIPS

OUR PEOPLE

Our single strongest asset are our highly skilled and dedicated people. With over 70% of our employees holding a degree or higher qualification, our industry specialists are a key differentiator, enabling us to create significant added value for our customers.

PARTNERSHIPS

AGM prides itself on developing strong partnerships throughout our supply chain. This ability has enabled AGM to build an industry-leading sales distribution network. By working closely with our customers' technical teams, AGM is able to optimise the development process to reduce the time to market for new products whilst ensuring the customer can benefit from the maximum product benefits.

INTELLECTUAL PROPERTY

Our unique proprietary graphene nanoplatelet production technology and expertise in dispersion techniques allow AGM to continuously innovate and enable an increased IP portfolio.

INNOVATION

In order to meet the requirements of both our current customers and future market opportunities, we continue to invest in our R&D capabilities. We strive to not only add to our existing ranges of standard products, but to advance graphene application know-how and provide outstanding customer technical support.

OUR DIFFERENTIATORS

DISPERSION

AGM's dispersion technology is the key enabler to benefit from the use of graphene nanoplatelets.

- IP protected technology has enabled the development of the standard **Genable** product ranges
- Dispersion optimised to suit end-user application across target industries
- Long term dispersion stability, reducing the risk of agglomeration and integration programme
- Dispersions available in a range of media to ensure compatibility with commonly used industrial systems
- Environmentally friendly, easy and safe to incorporate in existing industrial products and processes

APPLICATION

AGM's application technology enables a clear understanding of end-user needs, develops a roadmap to successful development and delivers clear performance benefits.

- Deep customer technical engagements
- Understanding customer requirements enables the creation of a roadmap for product development both technically and commercially
- Standard "off the shelf" **Genable** dispersions offer customers a toolbox of additives across a range of applications
- Innovation Accelerator Programme allows customers direct access to our R&D team to be able to customise development plans to ensure the optimum results

ENABLING DATA

AGM has developed a significant library of "how-to" data to validate the use and performance of graphene nanoplatelets.

- Customer technical services supported by an extensive library of "how-to" guides and information to support product claims
- AGM can offer customers a series of Technical Application Notes, to assist them with the use, incorporation and benefits of graphene in their systems
- AGM is at the forefront of engagement with regulatory associations and development panels, striving to ensure the safe use of nanomaterials

PROVEN TECHNOLOGY AND CUSTOMER SUCCESS

SALES TEAM AND DISTRIBUTOR ENGAGEMENT

A clear route to market through our industry specialist sales team and distribution partners. This has already resulted in numerous industrial product launches and the development of a customer pipeline with over 180 active engagements.



DISPERSION AND APPLICATION IP AND CAPABILITY

- Coatings – anti-corrosion, barrier and conductivity performance
- Car care – paint protection, UV, weathering, shine
- Composites – mechanical property performance uplift
- Adhesive and elastomer benefits
- Functional materials performance
- Printing technology platform

PROVEN DATA

- **Genable** dispersion performance – proven test results in anti-corrosion delivering 5x anti-corrosion performance compared to industry standard system
- **Blocksil** – significant uplift in performance with over 10,000 hours' neutral salt spray testing
- **James Briggs' Hycote Graphene Primer** delivering 4x the performance compared to its standard graphene free primer
- Enhanced mechanical performance in composite materials systems
- Low density, lightweight and thermally conductive adhesive for aerospace applications
- Step change in performance improvements for car care market

CREATING VALUE FOR

SHAREHOLDERS

- Investment growth opportunity
- High growth industry offering potentially significant returns

PEOPLE

- Jobs and career development opportunities
- Working in a leading-edge materials science company
- Recognition of performance

CUSTOMERS

- Interaction with AGM's graphene experts
- Development of new products:
 - Enhanced performance
 - Increased market share
 - Improved returns
 - Solutions for customers

COMMUNITY

- Employment opportunities including apprenticeships
- Strengthening local tech economy

Our stakeholders
Page 20

COMMERCIALISING GRAPHENE

AGM's products are all supported by an exceptional level of technical data which clearly demonstrates the benefits of using graphene in industrial systems. Customers are further supported by AGM's industry specialists to enable the confident incorporation of graphene into real industrial applications to deliver outstanding advances in performance benefits.



SECTION 172 STATEMENT

ENGAGING WITH OUR STAKEHOLDERS

Section 172(1)(a) to (f) of the Companies Act 2006 requires Directors to act in good faith, in a way that will promote the success of the Company for the benefit of its members as a whole, as well as having regard to the specific matters below. The principal decisions made during the year are described on pages 47 and 48 of the Corporate governance report.

STRATEGIC REPORT SECTION 172 STATEMENT

A. The likely consequences of any decision in the long term

Applied Graphene Materials plc's stated strategy is to seek to capitalise on its innovative technology. The Group works in partnership with our clients using our knowledge and expertise to provide standard and bespoke graphene dispersions and formats to deliver enhancements and benefits for a wide range of applications where we can deliver maximum value. Decisions are taken by the Board with this in mind. Examples of this are principal decisions 1, 2, 3, 4 and 5.

B. The interests of the Company's employees

The Board believes that its employees are key stakeholders within the Group and as such welcomes any feedback particularly through the formal process of employee engagement surveys and through feedback via the head of each department. Throughout the COVID-19 pandemic, frequent briefings have been held and employees consulted during these difficult times. Examples of this are principal decisions 1 and 2.

C. The need to foster the Company's business relationships with suppliers, customers and others

Operating with fairness and integrity, we work with our supply chain and our sales pipeline customers to develop a working relationship which benefits all parties. The Board recognises that the success of the Company is reliant upon all stakeholders in its business. We produce a monthly newsletter which is available to all stakeholders. Examples of this are principal decisions 3 and 4.

D. The impact of the Company's operations on the community and environment

The Board considers environmental protection to be a high priority and has in place an environmental policy where the focus is on minimising the impact of its activities and operations on the local, regional and national environments. We have assessed our status of compliance with the United Nations Sustainable Development Goals (SDGs) and developed a plan for the future (see page 31). An example of this is principal decision 4.

E. The desirability of the Company maintaining a reputation for high standards of business conduct

The Board aims to lead by example and do what is in the best interests of the Company, its stakeholders and shareholders and the Board has adopted the QCA code as that covers best practice. The Executive Directors strive to act in a manner which is professional and ethical and has published its ethical policies for all employees to observe and comply with. Further, with regard to responsibility and high standards for safe use of our materials, we have adopted certain policies to ensure that the customer experience with our innovative technology is low risk.

F. The need to act fairly between members of the Company

The Company communicates with shareholders through the Annual Report and Accounts, full-year and half-year announcements, the Annual General Meeting and release of news via LSE and OTCQX channels. Consequently, all members become privy to any price sensitive information at the same time and are treated equally in all respects.

Who does the Board deem to be the Group's key stakeholders?



STAKEHOLDER ENGAGEMENT

Our stakeholders are at the forefront of advanced coatings and material development, driving performance improvements for some of the world's most complex applications. Their input is crucial to guide AGM's business strategy.

AGM strives to achieve ambitious targets for the benefit of its stakeholders. The Company's commitment to R&D drives innovation and its flexible, forward-thinking approach ensures its activities remain in line with the varied and evolving expectations of its stakeholders.

We pride ourselves on our commitment to continuous innovation, in order to ensure that we perform better as a company and stand out from other manufacturers offering effective solutions to real life application problems.

WHO ARE OUR STAKEHOLDERS AND HOW DO WE ENGAGE WITH THEM?

Our shareholders, our people, our customers, our suppliers and our community make up the main stakeholder groups for AGM. We engage with each stakeholder in different ways, ensuring regular communication and consultation.

This includes formal announcements, interviews, newsletters and press releases, as well as conference attendance and presentations showcasing AGM's latest technical developments.

Stakeholder engagement forms a part of AGM's regular business cycle to ensure current developments are relayed and any major changes to Company strategy captured within a reasonable time.

AGM seeks input from all stakeholders with knowledge sharing and learning opportunities at regular internal and external meetings.

WHY ARE THEY IMPORTANT TO THE BUSINESS?

Regular engagement with all our stakeholders builds trust, instils confidence and strengthens business relationships. AGM aims to foster these relationships in order to understand stakeholder needs and make balanced and fair decisions to meet them. To remain relevant, regular interaction with key stakeholder groups is essential, so that we can adapt our strategy as required. Close collaboration ensures their long term support and enables continuous development of our overall value proposition.

As our people underpin our ongoing success, employee engagement is also essential to enhance our positive Company culture, retain talent, drive efficiency and boost productivity.

Ongoing involvement in industry communities and membership organisations helps AGM to source new business opportunities and build partnerships on mutual values.

WHAT ARE THE OUTCOMES OF ENGAGEMENT?

AGM realises that project success means different things to different stakeholders. With this in mind as we grow as a company, increasing importance is being placed on performance management and the measurement of relevant KPIs.

A key outcome of stakeholder engagement is the motivation of staff to ensure job satisfaction and talent retention. AGM employees continue to benefit from training opportunities and accountability through clear roles and responsibilities.

Through consultation with its stakeholders, AGM has consistently sought to adopt the safest working practices throughout the COVID-19 pandemic. It has carefully considered how best to balance the continuity of work on site at Wilton with the safety and wellbeing of its stakeholders. As the effects of the pandemic subside and vaccines are more widely adopted, AGM will emerge in a strong position as an organisation.

HOW DOES THE BOARD REFLECT THE VIEWS OF STAKEHOLDERS IN ITS DECISION-MAKING PROCESS?

AGM's strategy and reporting on the operational and financial performance form part of a consistent and transparent process, so that stakeholders can make informed decisions.





Feedback on the views of stakeholders is received through AGM's customer service channels, its website, stockbrokers, financial advisors, focus groups and regular structured meetings, all of which facilitate the sharing of information.

The recent launch of the new **Genable 1700** sustainable graphene dispersion range reflects AGM's commitment to sustainability and continuous improvement to align with the principles of the UN Sustainable Development Goals, a framework which is integral to the environmental work of the global sectors in which it operates. This is an example of how AGM has responded to market demand, developing new technologies that are in the interest of all stakeholder groups.



OUR STRATEGY

FOCUS ON MOMENTUM

	Strategy	Update and achievements
Innovation and technology	 SUPPLY OF HIGH QUALITY GRAPHENE NANOPLATELETS Continue to develop in-house capability to synthesise high quality graphene to meet customer demand.	<ul style="list-style-type: none"> • Production optimisation and streamlining continue to be a priority. • Increased analytical expertise to enable advanced understanding of graphene nanoparticles. • Regulatory approval for graphene nanoplatelets on a global platform.
	 EXPAND DISPERSION CAPABILITIES AND ENABLE INTEGRATION OF A BROADER RANGE OF GRAPHENES Building on industry-leading dispersion capability and expertise in the characterisation of graphene nanoplatelets, the Group has developed a range of products incorporating high quality graphene sources, enabling customers to benefit for a broader platform of graphene based applications.	<ul style="list-style-type: none"> • Expansion of standard off the shelf Genable dispersion range, optimised for application, and with long term in-can stability. • Development of dispersion know-how and capabilities. • Integration to dispersions of externally sourced graphenes to equip customers for a range of applications. • The Group launched new products in the bio-based and zero VOC dispersions sector, enabling customers to develop innovative green and bio-based products.
	 INVESTIGATE NEW OPPORTUNITIES IN GREEN ENERGY SECTOR, BUILDING OFF STRENGTH IN FORMATTING GRAPHENES Clear opportunities identified for green energy development using graphene. Technology push to meet these opportunities and grow revenues in this adjacency.	<ul style="list-style-type: none"> • Strategy development to define roadmap. • Identification of technology requirements. • Planning for delivery of technology.
Data	 MAXIMISE OPPORTUNITY THROUGH FOUNDATIONAL DISPERSIONS APPROACH The Group continues to focus on the development of optimised graphene nanoplatelet dispersions and ensure their safe use and ease of incorporation into customer systems, enabling them to benefit practically from the performance of graphene.	<ul style="list-style-type: none"> • Expanded standard Genable dispersion range are optimised off the shelf products enabling easy customer incorporation. • Extensive application testing by AGM's industry specialists has increased technology knowledge base and application "know-how" to enable extensive customer support. • Eco-friendly product range launched added with supporting data. • Multiple dissemination activities to ensure customers have the best data to support their efforts.

Outlook

- Deep regulatory engagement coupled with capacity development enables AGM to meet the demands of its customers.

Link to risks

- **OPERATIONAL**
- **COMMERCIAL**
- **SHE**
- **PEOPLE**
- **STRATEGIC**

- Standard, off the shelf, dispersions available in a range of media to enable easy incorporation of graphene into industrial applications.
- Development of a technology toolbox enables an individual customer approach to offer the best standard products or a customised dispersion to meet their requirements.
- Industry leading dispersion platform enables further expansion of the standard **Genable** product ranges to open up new industrial application and customer opportunities.

- **COMMERCIAL**
- **TECHNICAL**
- **SHE**
- **STRATEGIC**

- Extrapolation of current dispersed graphene technology into new areas in green energy sector.
- Coatings for battery, heat distribution adhesives, innovation for hydrogen opportunity.

- **COMMERCIAL**
- **TECHNICAL**
- **SHE**
- **STRATEGIC**


- Expanded standard, off the shelf, dispersions product range available backed by in-depth data.
- Development of a technology toolbox enables an individual customer approach to offer the best standard products or a customised dispersion to meet their requirements.
- Continuing commitment to provision of suitable application data to service needs of a wider customer engagement.

- **COMMERCIAL**
- **TECHNICAL**
- **SHE**
- **STRATEGIC**



OUR STRATEGY CONTINUED

Data continued

Strategy	Update and achievements
 <h2>ESTABLISH CUSTOMER RELATIONSHIPS</h2> <p>The Group continues to build close working partnerships with a wide range of customers across their core markets.</p>	<ul style="list-style-type: none"> • Industry focus on protective paints and coatings, car care coating products, polymer composites, speciality products. • In excess of 180 ongoing partnerships with customers examining the potential to incorporate graphene into their product range. • Continued development of strong customer relationships leading to progressive customer product launches. • Repeat customer sales developing.
 <h2>BUILD SALES DISTRIBUTION NETWORK</h2> <p>The Group's aim is to continue to grow its existing sales distribution network to ensure it has the right partners to be able to support customers globally.</p>	<ul style="list-style-type: none"> • Developed relationship with existing distributors and supported the development of their sales pipeline through to customer product launches. • Integrated new distribution partners to enable communication of the value adding benefits of graphene in their territories leading to sales opportunities.
 <h2>GENERATE REVENUES FROM THE SUPPLY OF GRAPHENE</h2> <p>The business continues to be focused on generating revenue from customer product purchases as well as a range of paid-for services to support customers to realise the performance benefits of graphene.</p>	<ul style="list-style-type: none"> • Breadth of the Genable product range has been expanded to create broader appeal to customers looking to use a wider range of graphene types through dispersion formats. • Customer testing in paints and coatings continues to be a lengthy process, but is well supported with exceptional application data. • New market focuses, such as car care, are enabling a much shorter lead time to market. • Customer product launches continue.

Outlook

- Resources are focused on supporting both existing and new customers to maximise the potential benefits of both the **Genable** dispersions and customised products in order to realise sales volume growth.
- Developing a strong repeat customer base, securing production orders and establishing supply agreements remains a high priority of the business.

Link to risks

- **COMMERCIAL**
- **TECHNICAL**
- **STRATEGIC**

- A developed network of distributors now in place is delivering a significant uplift in customer engagements, with final stages of the commercialisation process being reached on some projects.
- Further expansion of the network is planned with several new partners identified for future integration.

- **COMMERCIAL**
- **STRATEGIC**

- Technical and operations teams focused on supporting customers to ensure a timely completion of projects to accelerate time to market.
- Ensure production capacity is optimised to be able to fulfil the growing customer order demand.

- **OPERATIONS**
- **COMMERCIAL**
- **FINANCIAL**
- **STRATEGIC**
- **TECHNICAL**



STRATEGY IN ACTION

FROM ACADEMIC CONCEPT TO COMMERCIAL REALITY

One of the fundamentals of AGM's success is delivering graphene in a format that is **STABLE, EASY TO FORMULATE** and **SAFE TO INCORPORATE** for consistent, reliable performance enhancements in **REAL LIFE APPLICATIONS**.



TRANSFORMING THE COATINGS INDUSTRY

AGM's graphene nanoplatelet dispersion systems offer a new innovative approach to combating corrosion in the coatings industry.

Structural steel industries worldwide are now seeing the potential for graphene-enhanced products to be the future of corrosion-resistant coatings.

Graphene-enhanced systems are now offering longer lasting protection from harsh environments, such as those seen across the rail network as part of an extensive trackside container refurbishment project by AGM's UK based customer Blocksil.

Developed in partnership with AGM, Blocksil's fully integrated graphene based Primer and Top Coat MT coating system offers significant system anti-corrosion benefits, and will extend the life of Network Rail's equipment storage facilities.



DRIVING INNOVATION IN THE CAR CARE MARKET

Graphene continues to take high performance, next generation car cleaning and coating products to the next level. Enhanced with graphene, AGM's customers have seen a significant uplift in key properties, such as hydrophobicity, chemical resistance and improved durability, as well as a reduction in dirt pick-up. The ability to formulate with a compatible **Genable** graphene dispersion from AGM has played a key role in realising the true benefits of graphene for the car care sector.

Forward-thinking industry players continue to drive graphene innovation for car detailing applications.

Amongst others, two companies (Constellation Chemicals and Infinity Wax) have launched their new ceramic and snow sealants and alloy wheel wax products.



PUSHING BOUNDARIES IN THE CYCLING SECTOR

UK based Tru-Tension manufactures products for biking enthusiasts. Since securing investment from Touker Suleyman on the BBC's Dragons' Den, the company has grown from strength to strength. Partnering with AGM, it launched a new high performance detailing spray enhanced with industry-leading **Genable** graphene dispersion technology.

Users suggest that the innovative spray offers an unrivalled high gloss finish that also acts as a protective layer to leave paintwork glistening, and that the newly formulated hydrophobic coating also reduces dirt build-up to make future cleaning easier.

The development represents another example of how AGM's graphene dispersion technology is enabling products to stand out in the market.

OUR MARKETS



PAINTS AND COATINGS

Overview

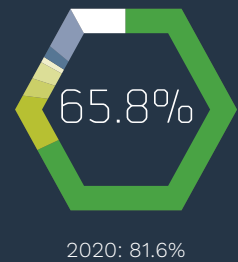
A key focus of AGM for the coatings industry is the improvement in barrier, anti-corrosion, mechanical and conductivity properties for larger scale commercial projects with the addition of graphene. The potential uplift in performance offers significant added value and life cycle benefits for both the coating companies as well as the downstream asset owners.

Market requirements

- Anti-corrosion and barrier performance
- Electrical conductivity
- UV protection
- Chemical resistance
- Synergies with existing active and passive ingredients
- Sustainability
- Low VOC products

Market breakdown by number of engagements

68.1%	Industrial (2020: 51%)
9.2%	Automotive (2020: 15%)
2.5%	General (2020: 9%)
2.5%	Aero/defence (2020: 8%)
0.8%	Oil and gas (2020: 1%)
1.7%	Flooring (2020: 1%)
6.7%	Marine (2020: 5%)
8.4%	Other (2020: 9%)



CAR CARE AND OTHER FUNCTIONAL MATERIALS

Overview

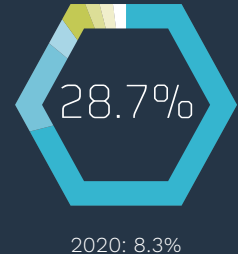
Entrepreneurial leaders in the fast-moving car care market are constantly looking to innovate and exploit the differentiation that graphene can offer. There is growing interest in using graphene in cleaning and coating products to protect surfaces and improve car aesthetics. As consumer awareness increases, combined with the rising levels of disposable incomes and technological advancements, the car detailing product market continues to grow.

Market requirements

- Hydrophobicity
- UV protection
- Heat dissipation
- Chemical resistance
- Wet gloss finish

Market breakdown by number of engagements

71.2%	Car care (2020: 22%)
15.4%	Other (2020: 0%)
3.8%	Thermal paste/adhesive (2020: 22%)
3.8%	Cycle care (2020: 0%)
1.9%	Inks (2020: 12%)
1.9%	Oils (2020: 22%)
1.9%	Batteries (2020: 22%)



POLYMERS AND COMPOSITES

Overview

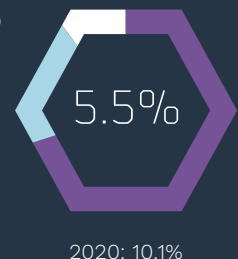
Activity in the composites sector remains customer led, but continues to be a dynamic market showing great potential for materials engineering. Customers continue to strive for performance improvements, and successful outcomes will result from close collaboration to integrate novel graphene material into the end application to support the production environment. As the market develops, further new applications become apparent across a broad spectrum of industries, from carbon fibre products for space applications, to automotive and green energy opportunities.

Market requirements

- Fracture toughness
- Fatigue resistance and durability
- Thermal conductivity
- Anti-static dissipation
- Electrical conductivity
- Weight reduction
- Sustainability

Market breakdown by number of engagements

70.0%	Aero/defence (2020: 37%)
20.0%	Industrial (2020: 18%)
10.0%	Other (2020: 45%)





OUR MARKETS CONTINUED

FUTURE DEVELOPMENT OPPORTUNITIES

The AGM team continues to make positive technical progress with a pipeline of customer engagements that represents a broad spectrum of applications.

Further technology platform work continues, and we look forward to new opportunities for extreme environments with our CX-type formulation and chemical resistance programme. These are anticipated to result in further exemplar data to support the use of graphene in areas such as pipeline applications, through to chemical storage facilities and waste water treatment. The development of graphene dispersions for use in harsh environments will also suit C4 and C5 marine, wind energy and oil and gas applications.

Customer activity in other areas outside of coatings and composites includes the use of graphene for friction and permeability/barrier combination in bearings, low friction applications and lubricants. In terms of the wider application of graphene in functional fluids, extensive investigative work continues to explore the benefits for next generation battery and electrochemical energy storage applications.

The launch of AGM's new eco-friendly **Genable** 1700 dispersion products to complement its existing water-based range will open up new engagement opportunities with environmentally aware customers, as they look for sustainable options in response to increasing market pressures to "go green".



TECHNOLOGY DEVELOPMENT ROADMAP

STRATEGIC APPLICATION DEVELOPMENT

Where next?

Green Energy

- Application of dispersion know-how to:
 - Expand expertise in Thermal materials for battery interface cooling.
 - Collaboration with universities on a range of battery technologies.
 - Hydrogen materials for fuel cells – exploratory work on lighter weight, high efficiency materials formats.
 - Hydrogen storage tank technology.
- Capture opportunities coming forward in batteries and Fuel Cells as we move towards a net zero carbon economy.
- Batteries
 - Our focus for the further development of coatings and dispersion technology in the area of batteries is in the use of our graphenes to enhance a range of applications including anode potential. A number of university activities have commenced and we are anticipating good progress in these projects investigating various aspects of the use of Graphene in battery technology. Our coating and dispersions know how positions AGM well in this area, particularly in the practical use and application of these nanomaterials.

- Thermal Interface Materials
 - Our thermal paste adhesives offer an excellent balance of thermal conductivity and low density for high performance in heat transfer applications. Extension of this materials technology is ongoing to enhance performance further and produce suitable formats of materials to meet the practical expectations of interface formation and enhanced cooling properties.
- Fuel Cells
 - Projects are well underway with universities to develop novel formats and structures containing graphenes to enable the greater potential for these nanomaterials within fuel cell applications. Targets include lighter overall weight and high efficiency. Projects also focus on scaling activity for manufacture of these novel structures.
- Hydrogen Storage
 - AGM dispersions technology has been used to great effect in linerless type V carbon fibre pressure vessel technology. Our materials have been deployed in both matrix materials to enhance mechanical attributes and in coating technology to enable improved diffusion control of these structures. As a baseline technology, we are confident to be able to develop this further with our customer to enable access to the hydrogen pressure vessel fuel storage sector.

BATTERIES

- PhD on novel battery coatings technology with Northumbria University
- St Andrews University project an investigation of graphene in batteries
- Working with Warwick Manufacturing Group on battery coating applications

THERMAL INTERFACE MATERIALS

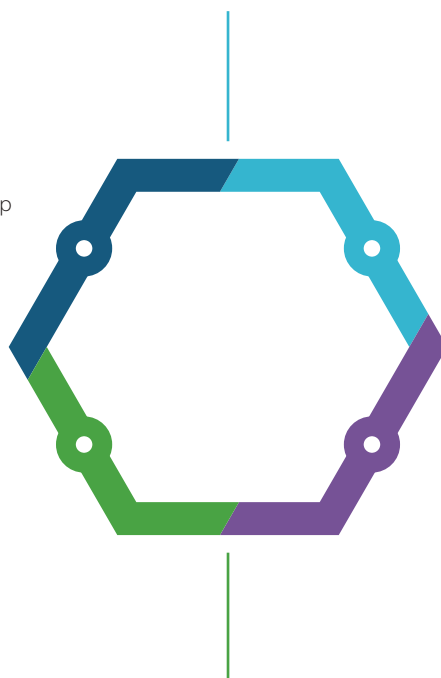
- Extension of existing know-how on thermal pastes with specific focus on application in batteries. Investigation of graphene enhanced technologies for cooling

HYDROGEN STORAGE

- Collaborative effort to develop graphene enhanced composite pressure vessels for hydrogen

FUEL CELLS

- Exploration of the use of lighter weight, high efficiency materials formats using graphene with Northumbria University
- Innovative graphene materials format scaling





SUSTAINABILITY

PEOPLE, PRODUCTS,
END-TO-END ENGAGEMENT

AGM's team is an outstanding, talented group and is core to our technology development and commercial engagement.

People

We are operating in an innovation-demanding environment whereby we need a talent base which is technology-rich and adaptable to the demands of the evolution of a start-up's journey to commerciality. In such unprecedented times with the full impact of COVID-19, adaptability has been the key to our continuing success. The AGM team has worked well together to ensure all of our operations continued in a safe manner to protect all staff. We took the decision not to furlough any staff during the pandemic. Our team is our greatest asset and continues to be the basis for the momentum for our exceptional technology development thus far in unlocking the utility of graphene nanoplatelets through our dispersed products technology. We value our people highly, seek to maintain their engagement and to ultimately deliver the commercial results we are all aspiring to together.

Right staff, right mix of staff

Our talent base is outstanding, having drawn employees from a range of backgrounds with skills that fit our business needs. The level of qualification of our staff is high and it is pleasing to continue to be able to attract new people to the team. Our policies on equal opportunities and non-discrimination support the process of employee engagement and development.

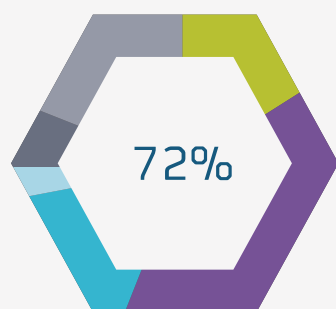
The rate of growth of the number of level 6 or above staff was lower than the growth rate in staff below level 6 so even though the number of staff with level 6 or above has increased, the percentage of the total has decreased due to also adding staff who will be progressively trained on the job.

Communications

The key to engagement with our staff to enable continuing alignment to strategy and direction of the business is effective, regular communication. As well as routine meetings across the business on the range of technology and operational subject matter, we hold regular "Coffee Break" sessions open to all staff. These enable the sharing of the latest information on the progress of the business and such forums are designed to be a two-way, open dialogue. Emphasis on enhanced communication has been vital for us as we continue to operate with the uncertainties of COVID-19. We set great store on the importance of secure IT capabilities to enable ease of engagement, especially with the increased frequency of working away from our facility. Overall, we have made good use of IT solutions and flexible methods of working.

We have an individual appraisal process whereby employees engage in both performance review and the opportunity to look to training opportunities, further education and career development.

QUALIFICATIONS



72% (2020: 80%) of our employees at 31 July are level 6 or higher

2021	2020		
16%	20%	Level 8	Doctorate or equivalent
40%	48%	Level 7	Master's degree or equivalent
16%	12%	Level 6	Degree with honours, e.g. BSc or BA or equivalent
3%	4%	Level 5	Level 5 NVQ or equivalent
0%	0%	Level 4	Level 4 NVQ or equivalent
6%	12%	Level 3	A levels or equivalent
19%	4%	Level 2	GCSEs grades C and above or equivalent

Integrity and equal opportunities

AGM is an equal opportunity employer. Aligned with UN principles, we actively seek to promote equal opportunities for all employees, avoiding discrimination on grounds of colour, sex, ethnic origin, gender, age, religious belief, disability, sexual orientation or marital status. Our standards of expectation are high with regard to staff relations, operating with dignity, respect, integrity and commitment to our business ambitions. We actively consider applications from disabled persons, reviewing suitability for a role based on the aptitude of the person. We value our equal opportunity and non-discrimination policies with regard to training and development opportunities for the individual. 28% of our total workforce are female and 13% of our total workforce are from an ethnic minority background. A diversity and inclusion survey is to be conducted to allow employees to self-identify.

All employees are entitled to additional benefits which support their wellbeing and quality of life including health and welfare. Opportunities to participate in benefits such as life insurance plans, health insurance scheme, company pension scheme and an SAYE scheme all aim to add value and security to our employees. All employees are also able to participate in an annual performance related bonus scheme which targets key milestones which the Directors believe reflect positive progress.

Environment, health and safety

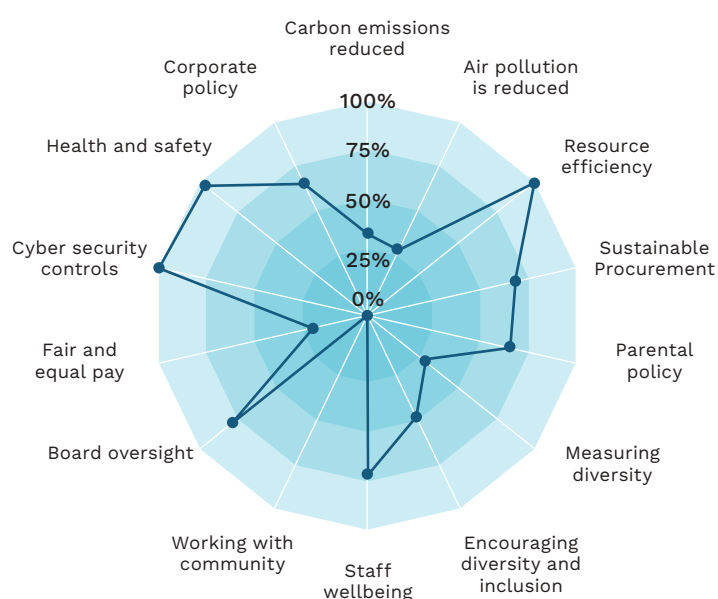
The EH&S-positive culture throughout the Group's activities is centred on identification and mitigation of risk with an emphasis on continuous improvement through learning and application. These principles apply not just to our employees and the in-house operations we pursue, but to all stakeholders in our processes. As such we value highly the quality of information which we present to customers related to products and services we offer. In addition to fulfilling regulatory documentation requirements as part of the supply process, we set great store on the further supply of additional information to support the safe use of our nanoplatelet technology in industrial environments. Such information ranges for application directions on use of our products to finding the safest, most appropriate delivery media for our graphenes to our customers and also looking at the complete end-to-end process of engagement. In particular, consideration of safe deployment of nanomaterials in customer processes is an important area of development. We further take great pride in our partnership in engagement with the EU REACH consortium for graphene registration. Equally we are engaged with many other regional bodies involved in regulatory approval for these innovative nanomaterials. The significant effort to supply supporting data to ultimately achieve regulatory approval supports our approach first and foremost to safe use of nanotechnology both in-house and in the broadest engagement.

Sustainability development roadmap

In addition to our in-house established structure, policies, guidance etc, we have engaged more fully with the process of sustainability action as a leadership team. We are committed to the broader process of continuous improvement to align with the principles of the UN Sustainability Development Goals (SDGs). In order to make a clear assessment of the quality of our business approach and policies, we have completed an initial assessment to determine where we can engage with the potential for positive impact with SDG principles. We have completed this review using the Global Reporting Initiative (GRI) metrics which will allow us to develop a roadmap for impactful opportunity in parallel with such opportunities.

Having completed the "Assess" stage of the process covering the last twelve months we have continued this work and our current review is summarised as follows:

Pillar	Outcome	Proportion of maximum score available
E	Carbon emissions reduced	38%
	Air pollution is reduced	33%
	Resource efficiency	100%
	Sustainable procurement	70%
S	Parental policy	67%
	Measuring diversity	33%
	Encouraging diversity and inclusion	50%
	Staff wellbeing	75%
	Working with community	0%
G	Board oversight	83%
	Fair and equal pay	25%
	Cyber security controls	100%
	Health and safety	100%
	Corporate policy	69%





SUSTAINABILITY CONTINUED

Sustainability development roadmap continued

We have defined key opportunities for implementation in the next twelve months:

Environmental

- Use carbon offsetting tools or initiatives to offset our carbon emissions
- Put initiatives in place to limit energy and carbon footprint, in our own warehouse/manufacturing facilities
- Put a policy and programme in place to achieve net zero carbon. Including monitoring plan with specific milestones (issued by the end of 2021)
- Put a corporate scheme to reduce plane travel in place
- Measure the percentage of our suppliers that we have screened for carbon efficiency
- Measure the percentage of our suppliers that we have conducted modern slavery due diligence on
- Measure our carbon footprint
- Create measures to reduce the emissions of our own distributors and prioritise logistics companies that have a net zero policy

Social

- Put a policy in place to provide support to staff around mental health and wellbeing
- Provide equality, diversity and inclusion training for our staff

Governance

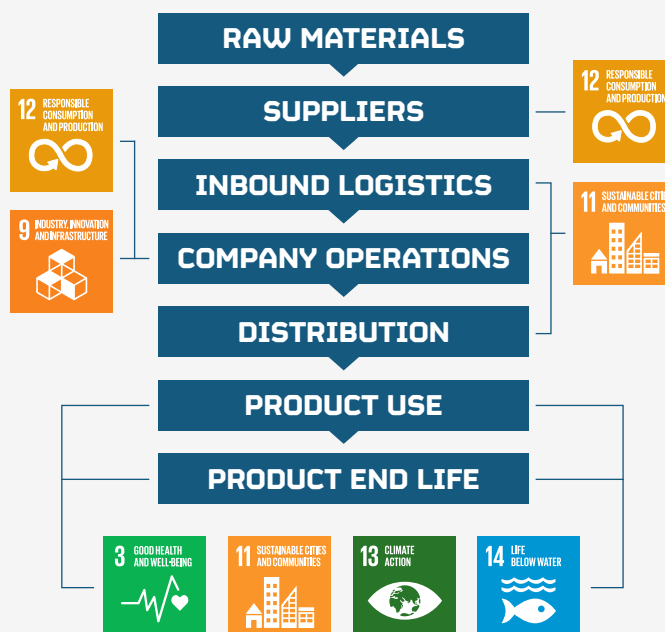
- Put an ESG/Social Value Policy in place
- Discuss sustainability more regularly at the Board level
- Calculate our gender pay gap

Key SDGs where we see greater opportunity related to our end-to-end business activity can be defined as shown below.

In addition to basic policy principles on employment and operating procedures, we see good potential in the areas of supply chain, logistics and distribution through the potential that our products offer in developing applications. Process development is also a key area for engagement, considering such aspects as recyclability, emissions and waste. We are planning to bring all packaging operations under our control at Wilton which means we can control the materials used and their recycling.

As part of the sustainability journey, we signified our intent to commit the UN Global Compact as a business at an appropriate time.

SUSTAINABLE DEVELOPMENT GOALS



PRINCIPAL RISKS AND UNCERTAINTIES

MANAGING OUR RISKS

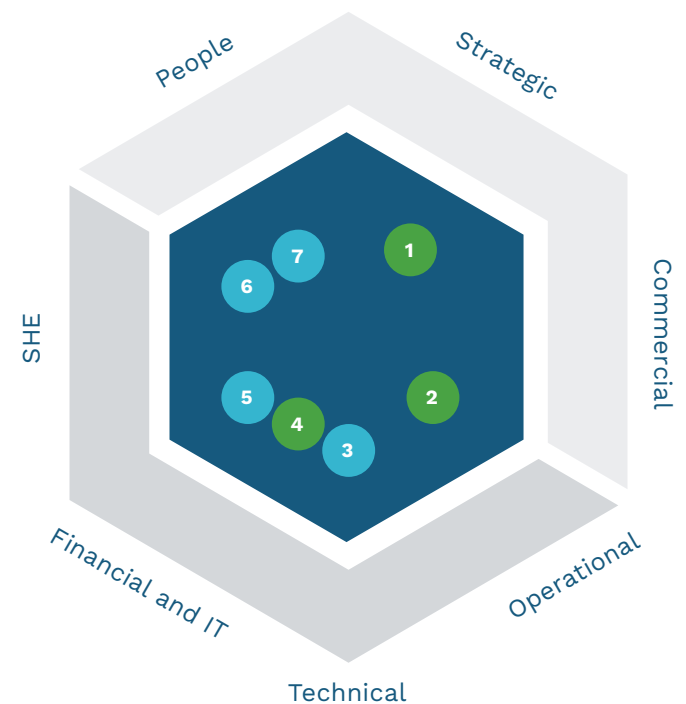
Risk management forms an integral part of the business planning and review cycle.

As a business we strive to achieve the right balance between risk and reward. The Board reviews and updates risks within the business on a regular basis. Having identified a potential risk, each risk is assessed individually both in terms of likelihood of occurrence and for the potential financial impact on the business. A further assessment is then made to ensure that the exposure to any risk is mitigated wherever feasible.

The Directors believe the following risks to be the most significant for stakeholders. However, the risks listed do not necessarily comprise all of those associated with an investment in the Group and are not set out in any particular order or priority. Additional risks and uncertainties not currently known to the Directors, or which the Directors currently deem not to be significant, may also have an adverse effect on the Group and the information set out below does not purport to be an exhaustive summary of the risks affecting the Group. In particular, the Group's performance may be affected by changes in market or economic conditions and in legal, regulatory and tax requirements.

Broadly, risks are categorised into seven types: strategic and planning; financial and IT; operational and quality; technical; safety, health and environment (SHE) and regulatory; commercial and reputation; and people. Significant risks facing the Group are listed on the following pages.

SIGNIFICANT RISKS FACING THE GROUP



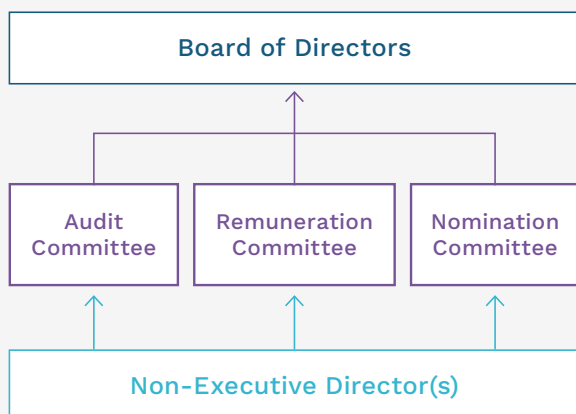
Items considered to be significant risks facing the Group

- Risk increased during the year
- Risk decreased during the year
- No change in risk

Key and links to strategy

- Increase manufacturing capacity and produce high quality graphene
- Build sales distribution network
- Maximise functionality through dispersions
- Generate revenues from the supply of graphene
- Establish customer relationships

RISK MANAGEMENT FRAMEWORK





PRINCIPAL RISKS AND UNCERTAINTIES CONTINUED

Risk and description

Potential impact

Mitigating circumstances

STRATEGIC AND PLANNING

1 Acceptance of the Group's products

Early stage of operations and acceptance of graphene.

Link to strategy



The Group continues to be at an early stage of development and the success of the Group will depend on the acceptance and attribution of value to graphene produced by the business. Timescales to the successful development of applications for graphene are significantly determined by the product development cycle of customers. There can be no guarantee that either acceptance of graphene or attribution of value will be forthcoming.

The business remains focused on its core markets and applications where it believes graphene can offer real benefits as a high end additive. In addition to continuing to invest in and develop in-house expertise, the technical team looks to maintain close working relationships with customers, to provide technical support and thereby reduce the time to market. The Group now has 19 launched products and customer acceptance has improved during the course of the year. In addition, a range of new eco-friendly products has been launched during the year. A broader range of graphenes used in dispersions also increases scope for materials selection and potential for successful outcomes.

Change

Impact



Likelihood



OPERATIONAL AND QUALITY

2 Consistency of product

As the business begins to supply graphene in ever larger quantities it is essential that the quality of the product is maintained.

Link to strategy



Working with nanomaterials is extremely technical and if products are not produced to a consistently high quality there is a risk that the products will not deliver the potential benefits and customers may look for alternative suppliers.

As the business looks to gear up its manufacturing capabilities to meet expected demand, it is essential that even at higher volumes the quality of material is maintained. In addition to working under strict operating procedures the business has implemented a series of quality control measures to ensure there is no drop off in product quality. Operating and quality procedures are continually reviewed and where appropriate improved, in order to ensure the highest quality is maintained at all times. The purchase of externally manufactured graphene mitigates this risk.

Change

Impact



Likelihood



TECHNICAL

3 Intellectual property

The Group's business is based on a combination of patents granted, patent applications and know-how.

Link to strategy



The Group's success will depend in part on its ability to maintain adequate protection of its intellectual property and know-how. There is no certainty that patent applications will be granted, that such applications and know-how will be a source of competitive advantage to the Group, or that others have not developed similar or better applications or know-how. Significant costs may be incurred in asserting intellectual property rights and there is no certainty that intellectual property could not become known in a manner (for example, cyber-attack) which provides the Group with no recourse.

The Group takes protection of its intellectual property very seriously, with information restricted on a need to know basis. Confidentiality clauses are used extensively throughout the business in a variety of forms, and key files and documents are maintained separately in a secure manner.

The Group has continued to submit patent applications during the year.

Change

Impact



Likelihood



Risk and description

Potential impact

Mitigating circumstances

FINANCIAL AND IT

4 Adequacy of financial resources

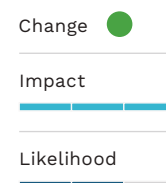
The available funding required to support the business through to profitability and cash generation may be insufficient.

[Link to strategy](#)



Currently, it is expected that additional capital will be required in future to fund the business. The Group may be unable to access additional debt or equity capital, or to raise funds on acceptable terms. In the event that the resources available to the Group are inadequate then this could have a materially adverse impact on the implementation of the Group's strategy, its business, financial condition and operations.

The Group raised £5.5 million in February 2021. The Group currently has a cash runway to at least Q2 2023. The Group has made significant advances recently with its expansion of its distribution agreements and the listing of its shares on OTCQX in the USA. The Group believes that it will have access to additional capital as required.



5 Financial, operational and management information systems

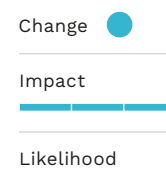
The efficient operation and management of the Group depends on the proper operation and performance of financial, operational and management information systems.

[Link to strategy](#)



Any failure in such systems via a cyber-attack may result in a loss of control and adversely impact the Group's ability to operate effectively.

The business takes a multi-faceted approach to ensuring its systems are able to support the business. This ranges from a series of back-up procedures, training and physical and virtual defence mechanisms. Regular reviews are undertaken to assess what additional precautions if any are required.



SHE AND REGULATORY

6 Safety, health and environment

The Group's operations are subject to numerous safety, health and environmental and regulatory requirements, both in the UK and overseas, which are likely to become more complicated, stringent and onerous as the Group grows or as time passes.

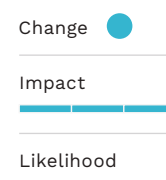
[Link to strategy](#)



Failure to comply in any way with SHE or regulatory requirements could result in the Group being unable to manufacture or supply graphene, incurring significant costs and liabilities, or being subject to claims and lawsuits, which could adversely affect its operations and financial condition. Graphene is also a relatively new material with a limited number of studies having been undertaken into its effects on biological systems. If evidence emerges that graphene has a deleterious effect then this may adversely impact the Group's business and financial position.

The Group undertakes regular training programmes to ensure best operating practices are maintained. This is assessed through an extensive audit programme along with health and safety meetings, which are held on a monthly basis. Employees who work with the product in its raw form operate under strict operating procedures with designated protective clothing at all times. In addition, they are required to undertake regular health checks.

AGM applies a high priority to engagement with regulatory authorities regionally and is active in pursuit of regulatory approval for commercial volume use of its products. This cannot be guaranteed, however, and therefore represents some commercial risk.



PEOPLE

7 Key personnel

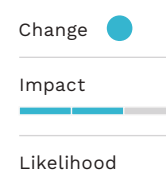
The Group has in place an experienced and motivated senior management team and is beginning to build strength in depth.

[Link to strategy](#)



If the Group is unable to retain and attract suitably skilled and qualified people, then the Group's performance and prospects may be adversely impacted. The loss of one or more key personnel could have an adverse impact on the Group's operations, reputation, relationships and future prospects.

In order to both attract and retain individuals with the necessary skills and motivation, the Group has a range of incentives and support processes in place. In addition to a comprehensive financial package of both short and long term incentives, individuals receive regular updates in an open and transparent manner, both on an individual and team basis. Training and development programmes are tailored to meet the needs and aspirations of the individual.





FINANCIAL REVIEW

COMMERCIAL MOMENTUM

We gained sales momentum in the first seven months of the year and this is starting to return following our customers returning to work. Significant improvements in our distributor arrangements should continue this momentum into 2021.



DAVID BLAIN

Key points

- Results in line with expectations
- Cash at 31 July 2021 was £6.3 million (2020: £3.8 million)
- £0.4 million R&D tax credit received in the period
- Revenues in second half of 2021 were 97% of the revenues for the whole of the previous financial year
- Cash runway extended to beyond 31 January 2023

Revenue

Revenue for the year was £123,000 (2020: £83,000) arising from the supply of production orders and evaluation quantities of graphene to commercial partners. Some revenue has been delayed due to the COVID-19 pandemic primarily due to our customers having not been able to access their customers' sites. Despite this, revenues in H2 2021 were 192% of H1 2021 and 97% of the sales for the whole of the prior year. Although these remain relatively small numbers, we are encouraged by this growth in H2 2021.

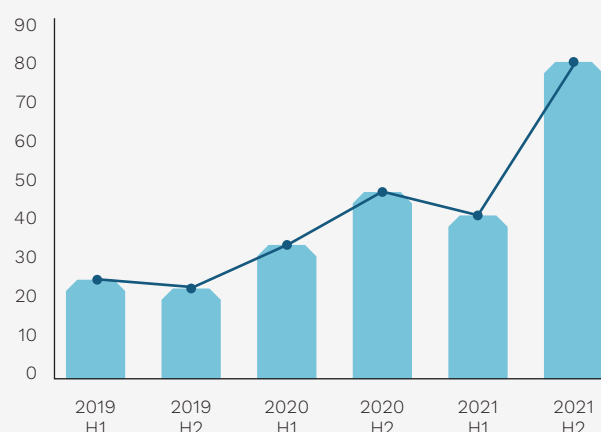
Cost of sales

Cost of sales of £363,000 (2020: £215,000) reflects the costs of producing graphene dispersions. We recognise the cost of production in the income statement as it is incurred. Cost of sales includes staff costs of £181,000 (2020: £156,000). Once the Group receives more recurring production orders, graphene inventories will be recognised as stock at manufacturing cost.

Operating expenses

Operating expenses of £3,319,000 fell by £247,000 compared to the prior year costs of £3,566,000. There were no exceptional costs incurred in 2021 whereas an exceptional cost of £168,000 was incurred in 2020 in relation to the realignment of the cost base. Reductions in staff costs, travel and depreciation charges of £303,000 were offset by increases in research and development costs, professional fees and other costs totalling £182,000. The share based payment charge increased by £46,000 compared to the previous year.

Half yearly sales £'000





Some revenue has been delayed due to the COVID-19 pandemic primarily due to our customers having not been able to access their customers' sites. Despite this, revenues in H2 2021 were 192% of H1 2021 and 97% of the sales for the whole of the prior year. Although these remain relatively small numbers, we are encouraged by this growth in H2 2021."

Earnings on ordinary activities before interest, tax, exceptional costs, depreciation and amortisation (EBITDA)

Adjusted EBITDA for the Group increased from a loss of £3,084,000 in 2020 to a loss of £3,150,000 for the year ended 31 July 2021. The loss incurred reflects the ongoing costs of developing new products, working with commercial partners and the significant efforts undertaken to support those customers.

Exceptional costs

Exceptional costs recognised in the year were £nil (2020: £168,000). The costs in 2020 were incurred as a result of redundancy costs arising from the implementation of the realignment of the cost base.

Net finance expense

Net finance expense for the year was £6,000 (2020: income of £33,000) reflecting reducing cash balances and a reduction in associated interest income.

Loss on ordinary activities before tax

The loss on ordinary activities before tax was £3,565,000 (2020: loss of £3,665,000).

Tax

The Group has not recognised any deferred tax assets in respect of trading losses arising in the current financial year or accumulated losses in previous financial years. There remains sufficient uncertainty that taxable profits will be available against which deductible temporary differences can be utilised.

The tax credit recognised in the current financial year of £391,000 is in relation to R&D tax credits due for 2021 which is £85,000 lower than the previous year as a result of the reduction of costs incurred following the realignment of the cost base.

Earnings per share

Basic earnings per share was a loss of 5.6 pence per share (2020: loss of 6.4 pence per share). Adjusted basic earnings per share (before exceptional costs) was a loss of 5.6 pence per share (2020: loss of 6.1 pence per share).

Dividend

No dividend has been proposed for the year ended 31 July 2021 (2020: £nil).

Cash flow

Net cash used in operations was £3,019,000 (2020: £3,465,000). The change in net cash used in operations was largely due to the change in net working capital utilised. During the year, net working capital utilised increased by £99,000 (2020: decrease of £199,000). R&D tax credits received during the year amounted to £461,000 (2020: £1,316,000), being the credit for the year ended 31 July 2020. The prior year included two years of R&D tax credits. In 2020, following the realignment of the cost base, four Board members volunteered to defer payments of their salaries/fees (totalling £80,000) until the Group had further extended its cash runway. These deferred costs were paid during 2021. Capital expenditure incurred in the year was £218,000 (2020: £342,000).

During February 2021, the Company completed a fundraise by issuing 14,634,166 new Ordinary shares of 2 pence each at a price of 41 pence, thereby raising £5,552,000 net of costs.

Statement of financial position

Net assets have increased to £7,695,000 (2020: £5,285,000), principally reflecting the trading loss for the year more than offset by the issue of new shares as noted above.

The Group has cash at bank at 31 July 2021 of £6,308,000 (2020: £3,685,000). Cash at bank is on deposit with a small number of financial institutions for time periods ranging between instant access and up to 95 days in maturity.

Other than as noted above, the value and composition of the Group balance sheet is unchanged/consistent year on year.

As noted in the "Critical accounting estimates and judgments" section of the accounting policies, impairment testing was carried out for all non-current assets and no impairment was noted as the market value of the Group exceeds its net assets.

Parent Company Statement of financial position (unconsolidated)

The key matter impacting both the financial performance and position of the Company during the year ended 31 July 2021 relates to the impact of the IFRS 9 and IAS 36 impairment reviews undertaken during the year.

On 13 October 2020, the Company approved the conversion of loans receivable from Applied Graphene Materials UK Limited with a value before impairment provisions of £29,014,529 into equity. The Company then subsequently approved the proposal to reduce Applied Graphene Materials UK Limited's share premium account. The transactions were and are being carried out to strengthen the balance sheet of the subsidiary company.



FINANCIAL REVIEW CONTINUED

Parent Company Statement of financial position (unconsolidated) continued

Prior year credit losses and impairment provisions of £22 million were reversed following the conversion of the loan to equity.

At 31 July 2021, the Directors concluded that impairment provisions totalling £20 million in relation to the cost of investment in the subsidiary company were necessary (2020: £nil) to reduce the net assets of the Company to the market value of its shares as set out in note 9.

No other significant transactions or movements in balances have occurred during the year ended 31 July 2021, consistent with the Parent Company's principal activity as a holding company.

Accounting policies

The Group's consolidated financial information has been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006. The accounting policies used in the consolidated financial information are consistent with those set out in the audited financial statements.

Going concern

After making enquiries and producing cash flow forecasts, the Directors have reasonable expectations, as at the date of approving the financial statements, that the Company and the Group will have adequate resources to fund the activities of the Company and the Group for at least twelve months from the date of the approval of the financial statements. Although the business continued to make losses throughout the year to July 2021, meaningful commercial progress has been made during the year with the development of strong technical data to underpin the product offering, the launch of new eco-friendly graphene dispersions and the new products launched by customers. The increased level of commercial products and engagements provides the Directors with a reasonable basis on which to form the view that the Group continues to demonstrate meaningful progress.

As a group developing new applications for recently discovered materials, the Directors are mindful that there is an ongoing need to monitor overheads and costs associated with delivering the commercialisation programme and raise additional working capital on an ad hoc basis to support the Group's activities. As described on page 80 the Group raised £5.5m of additional funds in February 2021. The Group has no bank facilities and has been meeting (and will continue to meet) its working capital requirements from cash resources.

At 31 July 2021, the Company and the Group had cash reserves of £6.1 million and £6.3 million respectively. The Directors have prepared cash flow forecasts which show that the Group has sufficient cash on hand to satisfy the continued development of the business until at least 31 January 2023 in line with the strategic plan. Furthermore, the Directors have had regard to the consequence of further delays in generating revenue beyond the next twelve months and in this scenario the Directors remain confident that adequate resources are available for the foreseeable future.

On the basis of these forecasts covering the period to 31 January 2023 and the resources currently on hand, the Directors have a reasonable expectation that the Company and the Group will have adequate resources to fund the activities of the Company and the Group for at least twelve months from the date of the approval of the financial statements. Therefore, the financial statements have been prepared on a going concern basis.

Principal risks and uncertainties

The principal risks and uncertainties facing the Group are set out within the Strategic report of the Annual Report on pages 33 to 35.

Cautionary statement

The Business and Financial reviews have been prepared for the shareholders of the Company, as a body, and no other persons. Their purpose is to assist shareholders of the Company to assess the strategies adopted by the Group and the potential for those strategies to succeed, and for no other purpose. The Strategic report, containing the Business and Financial reviews, contains forward-looking statements that are subject to risk factors associated with, amongst other things, the economic and business circumstances occurring from time to time in the sectors and markets in which the Group operates. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a wide range of variables which could cause actual results to differ materially from those currently anticipated. No assurances can be given that the forward-looking statements in the Strategic report will be realised. The forward-looking statements reflect the knowledge and information available at the date of preparation.

By order of the Board

David Blain
Chief Financial Officer
12 October 2021

The Strategic report on pages 1 to 39 has been approved by the Board

Adrian Potts
Chief Executive Officer
12 October 2021

KEY PERFORMANCE INDICATORS

CASH AT BANK £'000



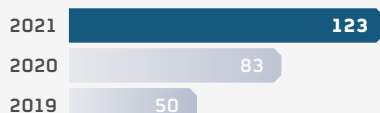
Description

Reconciled bank balances including committed but not yet cleared receipts and payments.

Performance

Placing completed in February 2021 raised £5.5 million (net) thereby extending the cash runway well into 2023.

REVENUE £'000



Description

The value of goods and services recognised as income in accordance with IFRS 15.

Performance

Revenues were £42,000 in H1 and grew to £81,000 in H2 compared to £83,000 for the whole of the previous financial year.

SALES PIPELINE – PROBABILITY WEIGHTED VALUE OF OPPORTUNITIES £'000



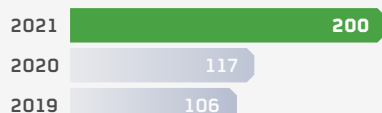
Description

The potential annual revenue (once product matures) is assessed for each opportunity in the sales pipeline and multiplied by its probability of success.

Performance

The value of the opportunities has remained constant despite the increase in the number of opportunities distributor engagements have been valued more conservatively.

SALES PIPELINE – NUMBER OF OPPORTUNITIES



Description

The number of opportunities in the sales pipeline including products launched from the pipeline.

Performance

Significant increase in the number of opportunities in the sales pipeline as a result of the appointment of additional distributors in 2020.

NUMBER OF PRODUCTS LAUNCHED DURING THE YEAR BY CUSTOMERS



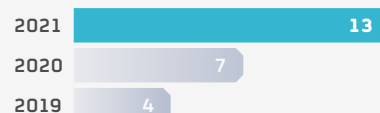
Description

The number of individual products launched by customers containing AGM products.

Performance

Eleven new products were launched by customers during the year bringing the total of launched products in the market to 19.

AGM PRODUCTS LAUNCHED PER YEAR



Description

The number of products launched by AGM during the year. Each range of products consists of a number of different dispersions.

Performance

AGM launched 13 new products in the year – being the new eco-friendly range of products and the Innovation Accelerator Programme. AGM's product ranges now include 40 products that are available for our sales team and distributors to sell.



BOARD OF DIRECTORS

THE RIGHT TEAM

The Board has extensive operational experience coupled with a detailed understanding of the chemical industry both within the UK and abroad. As a team the Board of Directors also benefits from significant financial, public company, risk management, commercial and transactional expertise.



DR BRYAN DOBSON
Non-Executive Chairman

Appointed

October 2013



Previous experience

Bryan has over 35 years' experience in the chemical industry with ICI plc and Croda International plc. Bryan started his career with ICI in 1978 and had a number of roles, both in the UK and overseas, including being European Regional Director of ICI Uniqema in the Netherlands in 2006. Following the acquisition of Uniqema by Croda International in September 2006, Bryan remained within the group and was President of Global Operations from 2008 until his retirement in 2011. He has held a broad range of senior business, technical and operational roles in the UK, the USA, Belgium and the Netherlands. Bryan holds a Bachelor of Arts from the University of Cambridge and a PhD from the University of Newcastle upon Tyne.

External appointments

Bryan is currently a Non-Executive Director of Itaconix plc.



DR ADRIAN POTTS
Chief Executive Officer

Appointed

August 2018

Previous experience

Adrian has over 30 years' experience in advanced composite materials product development, commercialisation and manufacturing leadership. He has worked at AGM since January 2015 as Vice President Business Development, employed to promote the Company's presence and graphene applications technology in the North American high performance coatings and composites markets. Prior to this role, Adrian worked within Cytec Industrial Materials as Global Business Development Director and President of its process materials business in California and as President of Umeco Structural Materials Inc in Oklahoma. Before moving to the USA in 2002, he held roles at Advanced Composites Group Ltd covering general business management, business development and research and development management activities and CML Group Ltd, where he had technical responsibility for the establishment of its composites division. Adrian holds a PhD in thermoplastics composite materials and a BSc in materials technology.

External appointments

None.



DAVID BLAIN
Chief Financial Officer

Appointed

October 2018

Previous experience

Prior to joining AGM David was CFO and Company Secretary for Nanoco Group plc, a Main Market listed nanomaterials company. After qualifying as a Chartered Accountant, David joined the Newcastle office of Price Waterhouse (now PwC), where he worked for nine years in audit and business advisory services. David then spent eleven years as the Finance Director of Drew Scientific Group plc, a medical diagnostics company on the Main Market. His next role was at the AIM-traded IT business EG Solutions plc, after which he became CFO of Renovo Group plc, the Manchester based biotechnology company that later became Inspired Capital plc.

External appointments

None.

BOARD SKILLS AND EXPERIENCE

	Strategy	Finance	Technical	Resources	Management
Bryan Dobson	Experience in area	No experience in area	Experience in area	No experience in area	Experience in area
Adrian Potts	Experience in area	Experience in area	Experience in area	Experience in area	Experience in area
David Blain	Experience in area	Experience in area	No experience in area	Experience in area	Experience in area
Karl Coleman	Experience in area	No experience in area	Experience in area	No experience in area	Experience in area
Sean Christie	Experience in area	Experience in area	Experience in area	Experience in area	Experience in area

Experience in area
 No experience in area



PROF. KARL COLEMAN
Chief Scientific Officer and founder

Appointed

October 2013

Previous experience

Karl achieved a PhD in chemistry at the University of Leicester in 1996 and is a Chartered Chemist, Chartered Scientist and Fellow of the Royal Society of Chemistry. His work is focused on nanoscience and nanotechnology, particularly the chemistry of graphene and carbon nanotubes. He has been funded by the Engineering and Physical Sciences Research Council and the Royal Society and he has authored or co-authored over 95 publications in peer reviewed journals which have accumulated over 4,200 citations. His work has been recognised with numerous awards, including the international Royal Society of Chemistry Entrepreneur of the Year Award 2011 for his development of intellectual property around the production of graphene, the Times Higher Education Research and Innovation Award 2012 and the Royal Society of Chemistry Materials for Industry – Derek Birchall Award in 2017. Karl established the Company in 2010 and, whilst he is employed by Durham University, he is Chief Scientific Officer and Director of Applied Graphene Materials.

External appointments

Karl is Professor of Nanomaterials and Head of Chemistry at Durham University, having previously been in the chemistry departments at the University of Oxford and the Université de Strasbourg. He is a committee member and immediate past chair of the Royal Society of Chemistry Chemical Nanoscience and Nanotechnology subject group.



SEAN CHRISTIE
Non-Executive Director

Appointed

April 2014



Previous experience

Sean is a Fellow of both the Chartered Institute of Management Accountants and the Association of Corporate Treasurers. Until his retirement, Sean was Group Finance Director of Croda International plc, which is a global manufacturer of speciality chemicals. Prior to joining Croda in 2006, Sean was Group Finance Director of Northern Foods plc. He also served as a Non-Executive Director of KCOM Group plc until 2007 and of Cherry Valley Farms Limited until its sale in 2010.

External appointments

Sean is currently a Non-Executive Director of Accsys Technology plc, OptiBiotix Health plc and Turner & Townsend Limited.

KEY FOR COMMITTEES

- Remuneration Committee
- Audit Committee
- Nomination Committee
- Committee Chairman



SENIOR MANAGEMENT TEAM

RUNNING THE BUSINESS

1



DR ADRIAN POTTS

Chief Executive Officer
August 2018

See Board of Directors on page 40.

2



DAVID BLAIN

Chief Financial Officer
October 2018

See Board of Directors on page 40.

3



ANDY GENT

Commercial Director
February 2020

Andy has nearly 25 years' experience working in the coating and polymer industries with both technical and sales management experience. Following the completion of a BSc in colour and polymer chemistry, he spent nearly ten years working on the R&D of coating systems with Clariant before transferring into the UK pigments and additives sales team. In 2008, he moved to Evonik TEGO, selling additives into the coatings industry across the UK and Scandinavia. During his time with Evonik, he successfully completed his MBA at Durham University. Prior to joining AGM, he worked for INVISTA UK as the European Business Manager for the TERATHANE® Polyol business. Andy originally joined Applied Graphene Materials in January 2018 as the UK and European Business Development Manager before promotion to the role of Commercial Director in February 2020.

4



TYRONE CHURCH

Operations Manager
February 2021

Tyrone graduated from Newcastle University in 2012 with an MEng in chemical engineering. Prior to joining AGM, he worked for Sembcorp UK on the Wilton International site. Tyrone originally joined AGM as a Process Engineer in 2014 and progressed to a Technical Plant Manager role in 2018 after managing the commissioning of two graphene plants.

5



WILLIAM WEAVER

Technical Director
February 2017

William has over 30 years' experience in the chemical industry and has served as a senior R&D executive with international experience across a number of sectors, including coatings, adhesives and composites. Prior to joining AGM he was Vice President of Technology & Strategy for Nuplex Industries with responsibility for innovation, technology strategy and intellectual property. In this role he led developments for both coating and composite applications, frequently collaborating with major developers such as Akzo Nobel, Sherwin Williams, Nipsea and AOC. Previous appointments include roles with Akzo Nobel Resins, Resinous Chemicals Ltd and Ciba Geigy. Besides degrees in chemistry and polymer science William is also a Member of the Institute of Directors and serves on the committee of the Management Group of the Royal Society of Chemistry.

OUR NEW OPERATIONS MANAGER, TYRONE CHURCH

Tyrone joined the AGM team in June 2014 as a Process Engineer.

During his time with the Company, he has gained experience in the design of AGM's graphene manufacturing plants and managed the commissioning process to ensure that the plants were commissioned on schedule with zero injuries or releases to the environment. Tyrone was promoted to the position of Technical Plant Manager and was responsible for day to day operations and providing process engineering support to the operations staff before moving into the role of Operations Manager in February 2021.

As part of the management team, Tyrone plays a pivotal role at the heart of the business as AGM expands its production capabilities and scales up to meet the growing commercial demand for its graphene products.

Q What are you looking forward to most about your new role?

I am most looking forward to having the opportunity to contribute to AGM's continued success and to help steer the organisation to becoming profitable and sustainable. To do this it is going to require a lot of hard work over the next few years but I believe that we have the right staff to make that happen and to drive the organisation to where we aspire to be.

Q What have you achieved over the last six months since being promoted to Operations Manager?

Over the last six months we've made some real strides forward in developing our understanding of what parameters are key to the success of scaling up our dispersion technologies and identifying projects to optimise our production facilities.

But I feel that one of the biggest achievements has been that the operations team has managed to maintain our manufacturing capabilities throughout the COVID-19 pandemic. As a company AGM has always taken a safety-first approach and implemented additional safeguards especially as government restrictions have eased. The view of the senior management team has remained unchanged and our main priority is the safety and wellbeing of our staff. That said there have been some tricky situations, particularly during the "pingdemic", when the team had to juggle various projects, but we have adapted well and made sure that projects were completed on time and safely.

Q How does your experience help the business?

In my personal life I've played rugby union for 25 years and one thing that has taught me is the importance of having the right players in the right roles. Using that experience we have restructured the operations team by adding a new QC Manager and a designated SHE Manager position to underpin the Company's focus on quality control, assurance and health and safety.

Also, the technical knowledge and understanding I've gained from having been involved in the design and commissioning of our manufacturing plants allow me to target our resources on improving and optimising the issues that matter most.

Q How is your team developing AGM's approach to manufacturing?

The operations team is developing a much closer relationship with the technical and business development teams within AGM. By working more closely with the technical team we are able to exchange information more efficiently on why a particular formulation has been chosen and what properties need to be replicated on scale-up to ensure that products perform in the same way. Likewise, working with the business development team allows us to understand what the customer wants and provides us with the opportunity to optimise products so that they are easier for the customer to use. Creating this synergy between the teams has really helped to streamline our dispersion product scale-up process and improve our efficiency.

Q What are your priorities for the year ahead?

The priorities for this year include working towards ambitious targets for plant optimisation and cost reduction by adopting lean manufacturing techniques. This will also allow us to reduce the amount of waste produced from our processes with the aim of setting up our own circular economy whereby we reuse or re-process our materials.

But the main priority for the year ahead is to build robust in-house production capability to meet the sales growth and demand. We will need to build on the foundations of the last six months and invest in the right scale-up technologies to support manufacturing to guarantee that sales growth doesn't outstrip capacity. It's an interesting challenge and the team we're building has the skill set to achieve this.

Q What is on the horizon for AGM as a growing UK SME?

As a leading innovator in the graphene space, the future of AGM is bright, both technically and commercially. As long as we ensure that our internal capabilities and operational structure continue to support this growth, the business will continue to be in a very strong position to become a major global player.

TYRONE CHURCH
Operations Manager





CORPORATE GOVERNANCE



DR BRYAN DOBSON
Chairman

The Board is committed to ensuring the highest standards of corporate governance are maintained. During 2018 AGM adopted the latest Quoted Companies Alliance Corporate Governance Code for small and mid-size quoted companies in full and has adopted further improvements since then.

Introduction

The Board of AGM recognises the importance of achieving high standards of corporate governance, integrity and business ethics for all of its activities. The Board has fully adopted and is fully compliant with the Quoted Companies Alliance Corporate Governance Code for small and mid-size quoted companies. In addition, we have a vote on the re-election of all Directors at every Annual General Meeting and we have an advisory vote on the Remuneration report.

Culture and business ethics

At the core of AGM's strategy to become a world leader in the supply of graphene lies our people. Identifying, attracting and retaining motivated individuals with the necessary skills underpins our business. As a business it is important that we act at all times with the highest standards in all aspects of our work. There are already numerous ways in which we look to uphold these standards ranging from our procedures to our whistle blowing policy. Whilst having the right policies and procedures forms a critical part in ensuring we are true to our culture and uphold standards, these can only be truly effective if all individuals embrace these values in their entirety. As part of its ongoing programme the Board regularly assesses differing aspects of our culture and standards, mindful of the fact that it is important to lead by example. One area of particular focus this year has been to ensure that the Board itself operates effectively in a fair and transparent manner and the assessment and appraisal programme introduced last year for all members of the Board has continued to be used this year, further details of which can be found on pages 46 and 47.

Board of Directors

Details of the Directors are set out on pages 40 and 41. The Board comprises a Non-Executive Chairman (Bryan Dobson), one Non-Executive Director (Sean Christie) and three Executive Directors. The Board considers both Bryan Dobson and Sean Christie to be independent in that they are free from any business or other relationships that might materially interfere with their exercise of independent judgment. Details of the Non-Executive Chairman's other commitments can be found on page 40.

The Board of Directors considers that its size and composition are currently appropriate and that the balance of skills and experience is correct for the current requirements of the business to enable the members of the Board of Directors to discharge their respective duties and responsibilities effectively. However, the Nomination Committee, in conjunction with the Board, will continue to consider succession planning and align this with the Group's strategy.

There is a clear division of responsibilities between the Chairman and the Chief Executive. The Chairman is primarily responsible for leading the Board, ensuring its effectiveness, setting its agenda and making certain that each Director is in receipt of adequate information prior to making decisions. The Chairman also facilitates effective communication with shareholders and makes himself available to meet with shareholders.

The Chief Executive Officer is responsible for the Group's day to day activities and leads the execution of the Group's strategy. All Directors have access to the advice and services of the Company Secretary and both the appointment and removal of the Company Secretary are matters for the Board as a whole. Directors are entitled to take independent legal or financial advice (paid for by the Company) in relation to the performance of their duties. Training is also made available to the Directors as appropriate, in relation to the performance of their duties.

All new Directors receive a personalised induction programme tailored to their experience and background, which is designed to develop their knowledge and understanding of the Group's culture and operations. Non-Executive Directors have regular opportunities to meet with Senior Managers within the business to enhance their knowledge and familiarity with the Group. Directors are also briefed by the Group's external advisors, where appropriate, on changes to legislation, regulation or market practice.

Meeting attendance

Directors are expected to attend all Board meetings and meetings of Committees of which they are members.

Directors' attendance at Board and Committee meetings is shown in the table below.

Time commitment

All Directors are expected to devote such time as is necessary for the proper performance of their duties. Directors are expected to prioritise and attend Board meetings and Committee meetings of which they are members and any additional meetings wherever possible. Further details of their terms and conditions are summarised in the Remuneration report on page 50 and the terms and conditions of appointment of the Non-Executive Directors are available at the Company's registered office.

After taking into consideration the availability and time commitment demanded of individual members, the Chairman remains satisfied that the members of the Board were able to devote sufficient time and resource to perform their roles for the Group.

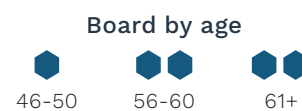
Board responsibilities

The Board is ultimately responsible for the business strategy and the financial robustness of the Group, for monitoring performance and for establishing a governance structure and practice which facilitate effective decision making and good governance. To enable the members of the Board to discharge these responsibilities they have full and timely access to all relevant information and Board meetings are usually held at the Group's manufacturing facility allowing Directors to review the operations and meet the management teams. Currently Board meetings are held virtually due to the impact of COVID-19.

The Group has established an operational board which meets regularly and is responsible for the day to day management of the business. Adrian Potts chairs the operational board, whose other members comprise David Blain together with the heads of the commercial, operations and technical functions.

Meeting attendance	Board meetings	Audit Committee	Nomination Committee	Remuneration Committee
Number of meetings held	13	3	1	1
Executive Directors				
Adrian Potts		—	—	—
David Blain		—	—	—
Karl Coleman		—	—	—
Non-Executive Directors				
Bryan Dobson				
Sean Christie				
Mike Townend*			—	—

* Resigned 25 March 2021.





CORPORATE GOVERNANCE CONTINUED

Board responsibilities continued

Chairman – Bryan Dobson:

- primarily responsible for the leadership of the Board, ensuring that it is effective and promoting critical discussion;
- chairs the Nomination Committee and the Annual General Meeting;
- sets the Board meeting agendas in consultation with the Chief Executive and the Company Secretary, ensuring they are aligned to the business strategy;
- leads the performance evaluation of the Board and ensures its effectiveness in all aspects of its role;
- sponsors and promotes the highest corporate governance and ethical standards;
- facilitates contribution from all Directors to the discussion of the Board;
- provides a sounding board for the Chief Executive on key business decisions and challenges proposals where appropriate; and
- ensures effective communication with shareholders and other stakeholders.

Chief Executive Officer (CEO) – Adrian Potts:

- develops and implements the Group's strategy with input from the rest of the Board, the management team and its advisors;
- responsible for the overall operational activity of the Group;
- manages the day to day business of the Group, leads its direction and promotes its culture and values;
- brings matters of particular significance or risk to the Chairman for discussion and consideration by the Board where appropriate; and
- responsible for overseeing the delivery of the sustainability agenda within the Group.

Executive Directors – Karl Coleman and David Blain:

- provide specialist knowledge and experience to the Board;
- support the CEO in the implementation of the Group's strategic policies;
- responsible for the budgeting process and reporting of the financial performance of the Group (David Blain);
- responsible for scientific input relating to the Group (Karl Coleman); and
- responsible for the successful leadership and management of scientific, risk and finance functions across the Group.

Non-Executive Directors – Sean Christie:

- brings complementary skills and experience to the Board;
- constructively challenges the Executive Directors on matters affecting the Group;
- provides a sounding board for the Chairman and supports him with the leadership of the Board;
- is available if shareholders want to raise concerns which normal channels have failed to resolve;

- chairs the Audit Committee;
- chairs the Remuneration Committee;
- satisfies himself as to the accuracy of the financial performance of the Group and the robustness and effectiveness of financial controls and risk management processes; and
- helps develop strategy with an independent outlook.

Company Secretary – David Blain:

- responsible to the Board;
- acts as secretary to the Board and each of its Committees ensuring compliance with procedures;
- responsible, under the direction of the Chairman, for ensuring the Board receives timely and accurate information;
- provides support to the Non-Executive Director; and
- responsible for advising the Board on all governance matters.

Leadership and effectiveness

The Board has extensive operational experience coupled with a detailed understanding of the chemical industry both within the UK and abroad. As a team the Board of Directors also benefits from significant financial, public company, risk management, commercial and transactional expertise.

During the previous twelve months, the Chairman undertook a detailed review of the effectiveness of the Board. This review encompassed two main elements, namely:

- an assessment of the overall effectiveness of the Board; and
- individual assessments of performance for each Board member.

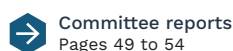
Each Director completed an individual questionnaire, which covered many aspects of good governance, including an assessment of the Board's performance overall. In addition to questions on culture, performance and effectiveness the questionnaire included detailed questions on strategic objectives, stakeholder engagement, audit and internal control assessment. The responses were then collated and discussed.

The second element of the assessment involved individual performance assessments for each Director. This involved the Chairman meeting individually with each Board member during the year. As well as assessing individual expertise and contribution, the review also encompassed governance, attendance and any areas for improvement. The Senior Independent Director, Sean Christie, having consulted with other members of the Board, undertook a review of the Chairman's performance.

Having completed this exercise it was concluded that the Board was operating in an effective manner and all members are considered to have made valuable contributions to the Board. Overall, it was determined that the Board meets its regulatory requirements and that the appropriate processes are in place for setting the strategic direction of the Group as well as maintaining the highest standards at all times. Furthermore, Board meetings are open to discussion and are constructive, and this forum enables all members to express their views.

Board Committees

The Board has delegated certain authorities to three Committees – namely the Audit Committee, the Remuneration Committee and the Nomination Committee, whose duties are as set out in this report. Appointments to each Committee are made by the Board. The Company Secretary is secretary to each Board Committee. The Board is kept fully updated on the work undertaken by the Committees and terms of reference have been adopted by each Committee that set out clearly the Committee's authority and duties. Copies of the terms of reference for each Committee can be found on the Company's website (www.appliedgraphenematerials.com).



Committee reports
Pages 49 to 54

Principal decisions, s172 report see page 20

We define principal decisions as both those that are material to the Group, but also those that are significant to any of our key stakeholder groups. For detail as to how we established and defined our key stakeholder groups see page 21. The relevant section of Section 172 for each principal decision is shown in brackets in the heading of each decision.

In making the following principal decisions the Board considered the outcome from its stakeholder engagement as well as the need to maintain a reputation for high standards of business conduct and the need to act fairly between the members of the Company:

Principal decision 1: COVID-19 – not to furlough any staff (A, B, C)

In FY 2020 the Board decided that it was in the best interests of all of our stakeholders that we do not furlough any staff and continue with ongoing research and development work and this was continued in FY 2021. Whilst COVID-19 did result in delaying some of our sales in FY 2021, it has not had a significant impact on our research and development operations. Any delay to our research and development activities would have been detrimental to all of our stakeholders in the longer term.

Principal decision 2: Fundraise of £5.5 million net of issue costs (A, B)

We successfully raised £5.5 million of new funds in January and February 2021 and this is beneficial to all stakeholders as it extends our cash runway from Q4 2021 to beyond 31 January 2023. In order to provide all our shareholders with the opportunity to participate in the fundraise, the Board decided that £500,000 out of the total raised should be achieved via PrimaryBid.

Principal decision 3: Launch of the Innovation Accelerator Programme (A, C)

We launched the Innovation Accelerator Programme to enable customers and potential customers to benefit from our extensive dispersion knowledge and testing facilities and develop their new products. "Innovation Accelerator" is a unique end-to-end research and development service to support businesses in harnessing the potential of graphene in their products.

Through Innovation Accelerator, AGM's unique offering can support customers through to product launch with this end-to-end service. The programme offers customers a range of innovative solutions, from exclusive graphene-enhanced dispersions tailored for their system, to working directly with AGM's technical experts to develop a customised project, formulation services and full system application testing and product characterisation.

Principal decision 4: Launch of eco-friendly range of products (A, B, D)

AGM has launched a ground-breaking new range of eco-friendly graphene nanoplatelet dispersions that will enable paints, coatings and composite materials customers to improve the sustainability of their product formulations in response to growing market pressures.

Materials suppliers are being driven to invest in bio-based innovation as customers and their end consumers become increasingly aware of the safety and environmental impact of the raw materials they use. Growing pressure to comply with stringent health and safety legislation and demonstrate a reduced environmental impact is forcing manufacturers to progressively introduce bio-derived alternatives to traditional chemicals.

AGM's **Genable** 1700 Series of eco-friendly graphene nanoplatelet dispersions is based on the Company's well-established **Genable** graphene dispersion technology, which is already proven to deliver significant performance uplifts such as chemical resistance, barrier and anti-corrosion properties. **Genable** graphene dispersions are integrated with a selection of certified, fully bio-based solvents and resins available in the market, including Cyrene™ (dihydrolevoglucosenone), an award-winning bio-renewable solvent, and industry-leading renewable resins Entropy Resin One and Entropy Resin CCR, a solvent free liquid epoxy resin and a solvent free hydroxy polyester.

Principal decision 5: To change the listing on OTCQB pink sheets to OTCQX (A)

This change to the Company's share listing to OTCQX (ticker: APGMF) increases the visibility of the Company to a wider range of US based investors and enables them to acquire shares in the Company much more easily than previously.



CORPORATE GOVERNANCE CONTINUED

Investor relations

The Board places significant importance on maintaining good communications with shareholders. The Executive Directors are mainly responsible for liaison with shareholders and are available to meet with institutional shareholders and analysts after the announcement of both the interim and annual results and have undertaken such meetings whenever requested by shareholders and analysts at other points during the course of the year. Each of the Non-Executive Directors is available to be contacted by, and to meet with, shareholders if required. Written investor feedback is provided to the whole Board by the Group's nominated advisor and brokers. The Interim and Annual Reports are sent to all shareholders, who are encouraged to attend and participate at the Company's Annual General Meeting to enable it to be a forum of substantive communication. The Group's investor relations website is regularly updated and contains information on current activities, including interim and annual results presentations. The Group also includes, on its website, audiocasts of its results presentations, for the benefit of all shareholders.

Internal control

The Board acknowledges its overall responsibility for the Group's system of internal financial and operational controls and the ongoing review of their effectiveness. These controls are designed to safeguard the Group's assets and the investments of shareholders. However, any system of internal control can only manage rather than eliminate risks and consequently such controls do not provide absolute assurance against misstatement or loss.

The main features of the Group's internal control systems include:

Allocation of responsibilities

Terms of reference for Board Committees are reviewed by the Board to ensure that the delegated authority and duties are still appropriate. The Group has a clear organisational structure that includes defined delegations of authority and authorisation limits.

Risk identification

The Board is responsible for identifying the main business risks faced by the Group and for determining the appropriate actions necessary to manage those risks. These risks are categorised into seven types being: strategic and planning; financial and IT; operational and quality; people; technical; commercial and reputation; and SHE and regulatory. These are detailed on pages 33 to 35.

Financial reporting and control

Monthly management information is reported to the Board which includes comparison against the budget and prior year. Functional reports are prepared for the Board and actions arising from the review of those reports and information are attributed as appropriate.

Investment appraisal

Capital expenditure is regulated by authorisation limits.

The Board has reviewed the effectiveness of the Group's framework of internal controls, including financial, operational and compliance controls and risk management systems, during the year ended 31 July 2021. The Board has also, where appropriate, ensured that appropriate actions have been taken to remedy weaknesses or failings identified from the review of the effectiveness of internal controls.

Whistle blowing policy

The Board has adopted a whistle blowing policy. The aim of the policy is to encourage all employees regardless of seniority to bring matters which cause them concern to the attention of the Non-Executive Directors.

By order of the Board

Bryan Dobson

Chairman

12 October 2021

AUDIT COMMITTEE AND NOMINATION COMMITTEE REPORTS

AUDIT COMMITTEE REPORT



SEAN CHRISTIE

Audit Committee Chairman

Committee members

Sean Christie and Bryan Dobson

Key responsibilities

- Reviewing significant accounting judgments and estimates:
 - Impairment of intercompany receivables and investment in subsidiaries (in the Parent Company only financial statements)
- Suitability of applying the going concern assumption
- Impairment review of property, plant and equipment
- Capitalisation of development expenditure
- Calculation of R&D tax credits

The Audit Committee comprises Sean Christie and Bryan Dobson, and is chaired by Sean Christie, who has relevant and recent financial experience. Mike Townsend was a member of the Committee until his resignation on 25 March 2021. The Audit Committee operates within its agreed terms of reference. It reviews the effectiveness of financial reporting and internal financial controls and monitors the integrity of the financial statements of the Group and any significant financial reporting judgments contained therein.

The Audit Committee recommends to the Board the appointment and re-appointment of the external auditors. The Audit Committee considers the scope and results of the external audit and its cost effectiveness. It also reviews the fees, independence and objectivity of the external auditors by analysing fees for audit and non-audit work, by discussing with the auditors their annual assessment regarding their independence, policies and procedures, and by receiving from the auditors confirmation that they have complied with the APB Ethical Standards. The Group's external auditors have unrestricted access to the Audit Committee and attended the Audit Committee meetings held during the year. In addition, the Chairman of the Audit Committee had contact with the external auditors outside of those meetings. The Executive Directors attend Audit Committee meetings by invitation only.

The Audit Committee reviewed the key areas of significant accounting judgments and estimates which applied to a number of significant matters in the preparation of the financial statements, as shown above.

Having considered the above, the Committee found the Group's estimates and assumptions therein to be appropriate. Further information relating to these areas can be found on pages 70 and 71.

The breakdown of fees between audit and non-audit services is provided on page 72 of the Group's financial statements. The Audit Committee is satisfied that the auditors remain independent and objective.

NOMINATION COMMITTEE REPORT



DR BRYAN DOBSON

Nomination Committee Chairman

Committee members

Bryan Dobson and Sean Christie

Key responsibilities

- Ensuring that the Board comprises an appropriate balance of skills, knowledge and experience
- Making recommendations to the Board on its size, structure and composition
- Giving consideration to succession planning for Executive and Non-Executive Directors

The Nomination Committee comprises Bryan Dobson and Sean Christie, and is chaired by Bryan Dobson. Mike Townsend was a member of the Committee until his resignation on 25 March 2021. The Nomination Committee is responsible for ensuring that the Board comprises an appropriate balance of skills, knowledge and experience. The Nomination Committee makes recommendations to the Board on its size, structure and composition and also gives consideration to succession planning for Executive and Non-Executive Directors. The Nomination Committee engages the services of external recruitment consultants as appropriate.

The key area for consideration by the Committee during the year was to determine whether we needed to appoint a Non-Executive Director to replace Mike Townsend following his resignation. The Committee determined, following consultation with the Company's Nomad and brokers, that the membership of the Board was appropriate for the Company at its current stage of development and no further action was needed but that this would be kept under review.



REMUNERATION REPORT

REMUNERATION COMMITTEE REPORT



SEAN CHRISTIE

Remuneration Committee Chairman

Committee members

Sean Christie and Bryan Dobson

Key responsibilities

- Determining the remuneration of the Executive Directors
- Setting short and long term targets
- Determining the service agreements and employment conditions for Executives

This report sets out the Group's policy on the remuneration of Directors and information on the remuneration paid to Directors for the year ended 31 July 2021 and for future years.

Remuneration Committee

The Remuneration Committee comprises Sean Christie and Bryan Dobson, and is chaired by Sean Christie. Mike Townend was a member of the Committee until his resignation on 25 March 2021. The Remuneration Committee met on one occasion in the year. The Chief Executive Officer and the Chief Financial Officer may be invited to attend part of some meetings of the Remuneration Committee as required. No Director or other employee plays a part in any discussion regarding their own remuneration. The Remuneration Committee's terms of reference can be found on the Company's website (www.appliedgraphenematerials.com).

Responsibilities

The Remuneration Committee reviews and determines the remuneration package of the Executive Directors. The Remuneration Committee's responsibilities include determining the base annual salaries, and setting and approving targets for any short term annual cash bonus or long term equity incentive schemes operated by the Group (subject to shareholder approval where appropriate). The Remuneration Committee also determines the service agreements and other employment conditions for the Executive Directors.

Remuneration policy

The remuneration policy set by the Remuneration Committee is designed to attract, retain and motivate people of high calibre and experience, which will enable the Group to fulfil its objective of increasing shareholder value. Accordingly, the Remuneration Committee seeks to provide competitive remuneration to all the Company's employees, appropriate to business and geographic environments. The Remuneration Committee recognises the need to reward at a level that is fair but attractive, whilst ensuring that a significant proportion of the remuneration of Executive Directors is linked to performance through the operation of the annual cash bonus scheme and equity incentive schemes.

The main elements of the remuneration package for Executive Directors are base salary, annual cash bonus and participation in equity incentive schemes. Both the annual cash bonus and equity incentive schemes are subject to performance conditions. In addition, Executive Directors receive other benefits in kind, including contributions to a defined contribution pension scheme, life assurance, private medical insurance and permanent health insurance. Only base annual salaries are pensionable.

Base annual salary

When determining base annual salary for Executive Directors the Remuneration Committee takes into account the performance, experience and responsibilities of the individuals concerned, the scope and complexity of that function or business, the strategic importance of the role to the Group and the salaries of those holding similar positions and responsibilities in comparable companies.

Base salaries are reviewed annually on 1 August. On 1 August 2021 a general increase of 2.0% (2020: 2.0%) in base salary was awarded to eligible employees across the Group including the Executive Directors. At the time of the review the Remuneration Committee had reference to the base salaries of employees in the wider Group. The following table sets out the base annual salaries of the Executive Directors.

	Base salary from 1 August 2021	Base salary from 1 August 2020
Adrian Potts ¹	\$244,100	\$239,300
David Blain	£143,300	£140,500
Karl Coleman	£29,500	£28,956

¹ The GBP equivalent at 1 August 2021 is £175,600 (2020: £189,200) using an exchange rate of \$:£ 1.3904 (2020: 1.2650).

Annual bonus

The Executive Directors participate in a non-contractual annual cash bonus scheme, which is the short term incentive element of the overall remuneration package of the Executive Directors. All annual cash bonuses are subject to the discretion of the Remuneration Committee and are linked to targets set by the Remuneration Committee. Subject to the achievement of targets, Executive Directors are eligible to receive a maximum potential annual bonus of 100% of their base annual salary.

Payment of a bonus is conditional on the Executive Directors being in employment at the time of the payment and not having received, or given, notice of termination of employment. However, the Remuneration Committee may exercise its discretion in exceptional circumstances if it feels that it is appropriate to do so.

2021 bonus

The bonus for the year ended 31 July 2021 was based on revenue targets and extending the cash runway into 2023. In line with the previous year, the targets set were challenging and, after taking account of actual performance compared to target, the level of bonus payment was determined to be 30% of the maximum potential annual cash bonus by the Remuneration Committee (2020: 30%). This bonus will be paid in October 2021 as a cash bonus.

2022 bonus

Performance targets for the annual cash bonus are set at the start of the financial year by the Remuneration Committee. Targets set in respect of the year ending 31 July 2022 are challenging and relate to a variety of key business indicators.

Equity incentive schemes

The Group operates two equity incentive schemes, firstly an Enterprise Management Incentive (EMI) scheme and secondly a non-approved executive option scheme. The non-approved executive option scheme is typically used for employees who are not eligible to participate in the EMI scheme or who have received awards up to the £250,000 EMI limit for employees.

During the year, an award was not made under the EMI and non-approved executive option schemes as the level of options granted in the last ten years has reached the levels allowed under current guidance. It is expected that option awards will be usually made annually in November of each year following announcement of annual results, with the next award to be considered in November 2021. Details of the awards previously made are set out below.

EMI and non-approved executive options – January 2019

The vesting of both EMI and non-approved executive options is subject to the relative performance of the Company's share price, compared to the FTSE AIM All Share Index, for the period from the date of grant to November 2021.

In the event that the Company's share price performs better than the FTSE AIM All Share Index, for the performance period, then 25% of the options will vest. Further vesting will be dependent upon the extent to which the Company's share price outperforms the FTSE AIM All Share Index, with full vesting arising for performance exceeding the benchmark by 25%. Percentage vesting is weighted towards the upper parts of the vesting scale. In each case, performance will be measured using the one month average share price and FTSE AIM All Share Index value in the period prior to the end of the performance period. The starting share price and the FTSE AIM All Share Index value in respect of the options granted were £0.32 and 898.9 respectively.

Subject to vesting the options would be exercisable in the period between November 2021 and July 2029. Nil consideration is payable in respect of either the grant or exercise of these options.

EMI and non-approved executive options – July 2018

The vesting of both EMI and non-approved executive options is subject to the relative performance of the Company's share price, compared to the FTSE AIM All Share Index, for the period from the date of grant to November 2020.

The performance criteria for these options were not met and the options have lapsed.

EMI and non-approved executive options – January 2017

The vesting of both EMI and non-approved executive options is subject to the relative performance of the Company's share price, compared to the FTSE AIM All Share Index, for the period from the date of grant to November 2019. These options have lapsed due to failure to achieve the performance criteria.

EMI and non-approved executive options – prior to AIM admission

In the period prior to the Group's admission to AIM, EMI options and non-approved executive options were granted to certain Directors.

Non-approved executive options awarded to Bryan Dobson, which were not subject to performance conditions other than remaining in post, vested during the year ended July 2014 and are now capable of being exercised.

Clawback provisions

Awards made under EMI and non-approved executive option schemes contain clawback provisions for a period of two years from the date of vesting. Generally, clawback may be invoked in the event of a misstatement of financial results impacting on the number of options vesting or an error being identified in the measurement of actual performance versus target, again impacting on the number of options vesting.

Pension arrangements

Employer pension contributions paid to Adrian Potts are paid as salary to reflect his existing personal pension arrangements. Employer pension contributions paid to David Blain are paid into his personal pension scheme. Karl Coleman is not eligible to participate in the Group's stakeholder pension plan.



REMUNERATION REPORT CONTINUED

Directors' service contracts

Under the terms of the service agreements in place with Executive Directors, six months' written notice must be given by either party to terminate those service agreements. Under the terms of the letters of appointment in place with Non-Executive Directors, three months' written notice must be given by either party to terminate that appointment. Summary details of the service agreements and letters of appointment are shown below:

	Effective date of service agreement/ letter of appointment	Notice period
Executive Directors		
Adrian Potts	1 August 2018	Six months
David Blain	22 October 2018	Six months
Karl Coleman	14 November 2013	Six months
Non-Executive Directors		
Bryan Dobson	14 November 2013	Three months
Sean Christie	24 April 2014	Three months

Compensation for early termination for Executive Directors is generally limited to six months' base salary and benefits. Any entitlements under incentive plans would ordinarily lapse in accordance with the terms of the relevant plan, unless the Remuneration Committee exercises its discretion as provided under the incentive scheme rules.

The Company believes that exposure of its Executive Directors to other company boards can be beneficial and can help to broaden their experience and knowledge. The Directors are therefore permitted to join other company boards as Non-Executive Directors, subject to prior approval of the Board.

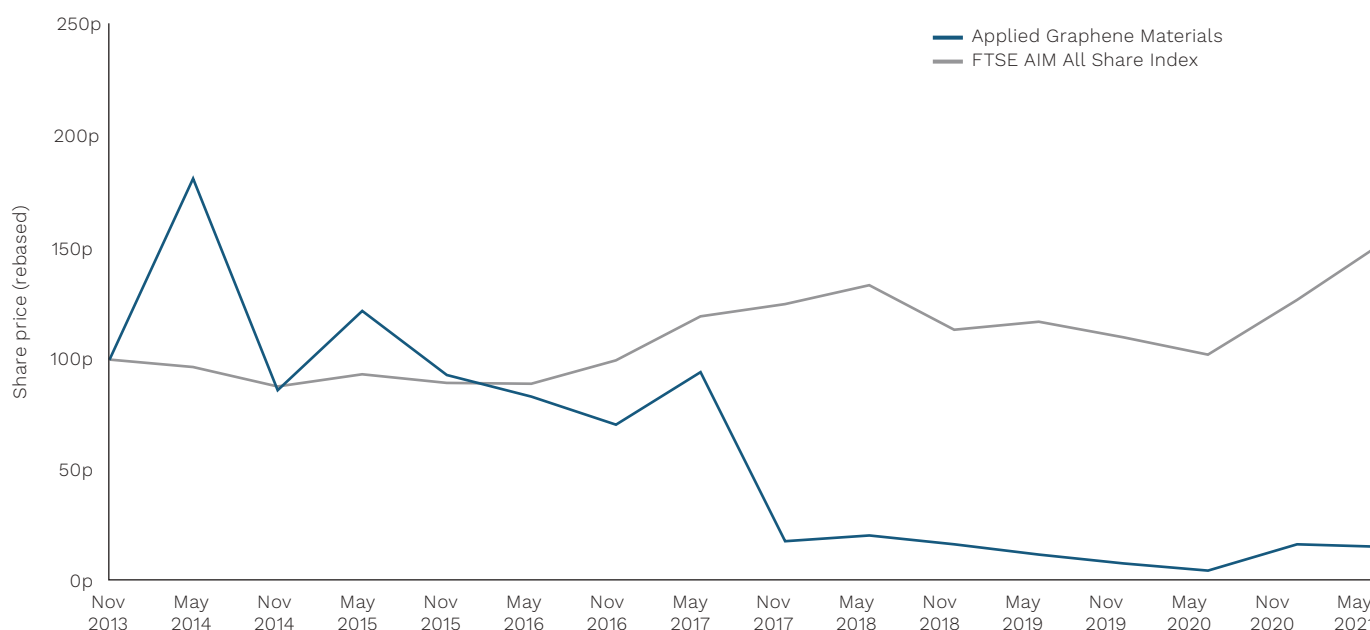
Non-Executive Directors

Remuneration of the Non-Executive Directors is determined by the Board and is designed both to recognise the responsibilities of Non-Executive Directors and to attract individuals with the skills and experience to contribute to the business. Non-Executive Directors receive an annual fee paid monthly.

Generally, Non-Executive Directors are not entitled to any new share based incentives, pensions or annual bonuses. Expenses incurred by the Non-Executive Directors in the performance of their duties are reimbursed by the Company.

Performance graph

The graph below shows the performance of Applied Graphene Materials' share price relative to the FTSE AIM All Share Index for the period between November 2013, when the Group's shares first became publicly traded, and July 2021. This index has been selected for comparison because the Company is a constituent of it.



Directors' emoluments

The aggregate emoluments of the Directors of the Company who served during the year ended 31 July 2021, paid by the Group, were:

	Salary and fees £'000	Benefits £'000	Annual bonus £'000	Pension contributions £'000	Total £'000
Executive Directors					
Adrian Potts ¹	195	18	57	19	289
Karl Coleman	29	—	4	—	33
David Blain	140	—	42	15	197
Non-Executive Directors					
Bryan Dobson	46	—	—	—	46
Sean Christie	36	—	—	—	36
Mike Townend ²	10	—	—	—	10
	456	18	103	34	611

1 Employer pension contributions paid to Adrian Potts are paid as salary to reflect his existing personal pension arrangements.

2 Fees payable to Mike Townend were payable to Top Technology Ventures Limited, which is a wholly owned subsidiary of IP Group plc, which Mike represented. Mike resigned on 25 March 2021.

The aggregate emoluments of the Directors of the Company who served during the year ended 31 July 2020, paid by the Group, were:

	Salary and fees £'000	Benefits £'000	Annual bonus £'000	Pension contributions £'000	Total £'000
Executive Directors					
Adrian Potts ¹	183	36	57	19	295
Karl Coleman ²	27	2	8	—	37
David Blain	138	—	30	14	182
Non-Executive Directors					
Bryan Dobson ²	45	—	—	—	45
Sean Christie ²	35	—	—	—	35
Mike Townend ^{2,3}	15	—	—	—	15
	443	38	95	33	609

1 Employer pension contributions paid to Adrian Potts are paid as salary to reflect his existing personal pension arrangements.

2 Following the realignment of resources in 2019, the following Directors agreed that they would wait to receive their salaries until the Group's cash flow permitted payment. The amounts unpaid (but included above) at 31 July 2020 were:

	£'000
Karl Coleman	19
Bryan Dobson	30
Sean Christie	23
Mike Townend	7
Total	79

The unpaid amounts at 31 July 2020 were paid during the year ended 31 July 2021.

3 Fees payable to Mike Townend were payable to Top Technology Ventures Limited, which is a wholly owned subsidiary of IP Group plc, which Mike represents.



REMUNERATION REPORT CONTINUED

Share options

The number of options over Applied Graphene Materials' shares held by Directors at 31 July 2021 is set out below.

	Options at start of the year	Number of options cancelled or lapsed in the year	Number of options exercised in the year	Number of options granted in the year	Options at end of the year	Option price	Exercisable
Adrian Potts							
Non-approved executive ¹	486,772	—	—	—	486,772	£nil	November 2021 to July 2029
SAYE	42,452	—	—	—	42,452	£0.21	August 2022 to January 2023
	529,224	—	—	—	529,224		
David Blain							
EMI ¹	360,000	—	—	—	360,000	£nil	November 2021 to July 2029
SAYE	84,905	—	—	—	84,905	£0.21	August 2022 to January 2023
	444,905	—	—	—	444,905		
Karl Coleman							
Non-approved executive ¹	45,673	(45,673)	—	—	—	£nil	November 2020 to July 2028
Non-approved executive ¹	54,392	—	—	—	54,392	£nil	November 2021 to July 2029
	100,065	(45,673)	—	—	54,392		
Bryan Dobson							
Non-approved executive	491,874	—	—	—	491,874	£0.20	May 2014 to July 2022
	491,874	—	—	—	491,874		
Sean Christie							
Non-approved executive	15,000	—	—	—	15,000	£1.55	April 2015 to April 2024
	15,000	—	—	—	15,000		

¹ Options remain subject to satisfaction of conditions.

The market price of the shares on 31 July 2021 was £0.26 and the shares traded in the range of £0.21 to £0.745 during the year.

Directors' interests

The interests of the Directors in the shares of the Company as recorded in the register of Directors' interests at 31 July 2021 were as follows:

	Number of Ordinary shares 2021	Number of Ordinary shares 2020
Executive Directors		
Adrian Potts	107,116	70,529
David Blain	57,770	33,380
Karl Coleman	1,823,584	1,779,682
Non-Executive Directors		
Bryan Dobson	158,706	134,316
Sean Christie	79,299	35,397
Mike Townend	—	22,619

Annual General Meeting

The Remuneration report will be subject to an advisory vote by shareholders at the Annual General Meeting.

Sean Christie

Chairman of the Remuneration Committee

12 October 2021

DIRECTORS' REPORT

The Directors present their Annual Report and the audited financial statements of Applied Graphene Materials plc (the Company) and of the Group (the Company and its subsidiary undertakings) for the year ended 31 July 2021.

Principal activities

The principal activity of the Group is the manufacture, dispersion and development of applications for graphene. The Group's operations are primarily within the United Kingdom. The subsidiary undertakings principally affecting the results or net assets of the Group are listed in note 9 to the financial statements.

Review of business and future developments

The Chairman's statement (pages 6 and 7), the Chief Executive Officer's review (pages 8 to 17) and the Financial review (pages 36 to 38) report on the performance of the Group during the year ended 31 July 2021 and its prospects for the future.

Key performance indicators (KPIs)

Due to the early stage of the development of the business, it is difficult to measure progress made purely in financial terms. However, in due course the Directors expect that EBITDA, adjusted diluted EPS and cash conversion will be the principal measures of financial performance in relation to the Group. Performance for these KPIs, which is explained in the Chairman's statement, the Chief Executive Officer's review and the Financial review, was as follows:

	2021	2020
EBITDA (£'000)	(3,150)	(3,084)
Adjusted EPS (pence)	(5.6)	(6.1)
Cash balance (£'000)	6,308	3,685

Substantial share interests

At 31 July 2021, the Directors are aware of the following interests amounting to 3% or more of the Company's issued share capital:

Name of shareholder	Number of Ordinary shares million	Percentage of issued share capital %
Hargreaves Lansdown Asset Management	9,016,402	14.01
IP Group	7,370,487	11.46
Herald Investment Management	5,869,089	9.12
Interactive Investor	4,964,334	7.72
Halifax Share Dealing	2,565,075	3.99
North East Finance	2,370,699	3.68
Bank of America	2,172,724	3.38

Directors and their interests

The Directors who served during the year (unless indicated) were as follows:

- Bryan Dobson
- Karl Coleman
- Sean Christie
- Mike Townend (resigned 25 March 2021)
- Adrian Potts
- David Blain

Biographical details of the Directors can be found on pages 40 and 41.

In accordance with the provisions of the Articles of Association of the Company as amended voluntarily by the Board, all Directors will retire and, being eligible, will offer themselves for re-election at the 2021 Annual General Meeting. The Directors' service agreements and letters of appointment will be available for inspection prior to and at the end of the Annual General Meeting.

Details of Directors' interests in the shares of the Company are shown in the Remuneration report on page 54.

Share capital

At 31 July 2021, the Group had 64,338,438 Ordinary shares of 2 pence each in issue (2020: 49,429,380). These shares are admitted to trading on AIM. The rights and obligations attaching to the Company's Ordinary shares are set out in its Articles of Association, which are available on its website. Each share in issue has equal rights and there are no restrictions on the voting rights attaching to the Company's Ordinary shares or on the transfer of securities in the Company. Full details of the issued share capital of the Company, including movements in the year, are set out in the notes to the financial statements. Details of share option schemes in place within the Group are set out in the notes to the financial statements.



DIRECTORS' REPORT CONTINUED

Financial instruments

Full details of the Group's risk management policies and its exposure to financial risk are set out in note 13 to the financial statements.

Directors' indemnities and directors' and officers' liability insurance

The Company's Articles of Association permit the Company to indemnify Directors of the Company in accordance with the Companies Act 2006. Directors' and officers' liability insurance is also in place.

Research and Development

Research and development costs incurred during the year were £1,324,000 (2020: £1,465,000).

Employees

Further details regarding employees can be found in the Sustainability report (pages 30 to 32).

Health and safety

Further details regarding health and safety can be found in the Sustainability report (pages 30 to 32).

Corporate governance

The Corporate governance report is set out on pages 44 to 48.

Audit information

The Directors confirm that, in so far as they are aware, there is no relevant audit information of which the auditors are unaware and that each Director has taken all reasonable steps to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information. A statement by the Directors of their responsibilities for preparing the financial statements is included in the Statement of Directors' responsibilities.

Information presented in other sections

As permitted by Section 414C(11) of the Companies Act 2006, certain information required by Schedule 7 of The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 to be included in a directors' report can be found in the Strategic report on pages 1 to 39. This is the case for information regarding future developments and R&D activities which is included in the Chief Executive Officer's review on pages 8 to 17. Information regarding dividends is contained within the Financial review on pages 36 to 38. Information relating to financial risk management policies and objectives is included in note 13 on pages 79 and 80.

Independent auditors

Our auditors, RSM UK Audit LLP, have indicated their willingness to continue in office. In accordance with the recommendation of the Audit Committee and Section 489 of the Companies Act 2006, a resolution to re-appoint RSM UK Audit LLP as the Company's auditors will be proposed at the forthcoming Annual General Meeting.

Annual General Meeting

The 2021 Annual General Meeting is to be held at 11am on Tuesday 7 December 2021 at The Wilton Centre, Wilton, Redcar Cleveland, TS10 4RF.

All shareholders are strongly encouraged to submit their votes on the formal business to be transacted using the proxy form enclosed with the Notice of AGM.

The Chairman of the AGM will propose that each resolution, as set out in the Notice of AGM, is voted on via a poll. This means that each shareholder present in person (which shall only be such number of Directors as is sufficient to ensure that the AGM is quorate) or by proxy will have one vote for each share held.

The Company will continue to monitor developments relating to COVID-19. If a situation should arise which necessitates that the arrangements for the AGM be altered, shareholders will be notified promptly via an RNS announcement and the Company's website.

As a result of the ongoing COVID-19 pandemic, the Board of the Company would ask that you do not attend the Meeting in person if you have symptoms that may be caused by COVID-19; if you are waiting for the results of a COVID-19 test; if you have received a positive COVID-19 test result; or if you live with someone with COVID-19 symptoms, or with someone who has tested positive for COVID-19.

By order of the Board

David Blain

Company Secretary

12 October 2021

STATEMENT OF DIRECTORS' RESPONSIBILITIES

Statement of Directors' responsibilities

The Directors are responsible for preparing the Strategic report, the Directors' report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare Group and Company financial statements for each financial year.

The Directors have elected under company law to prepare Group financial statements in accordance with international accounting standards in conformity with the requirement of the Companies Act 2006. The Directors have elected under company law to prepare the Company financial statements in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006.

The Group and Company financial statements are required by law and international accounting standards in conformity with the requirements of the Companies Act 2006 to present fairly the financial position of the Group and the Company and the financial performance of the Group. The Companies Act 2006 provides in relation to such financial statements that references in the relevant part of that Act to financial statements giving a true and fair view are references to their achieving a fair presentation.

Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Company and of the profit or loss of the Group for that period.

In preparing each of the Group and Company financial statements, the Directors are required to:

- a. select suitable accounting policies and then apply them consistently;
- b. make judgments and accounting estimates that are reasonable and prudent;
- c. state whether they have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006; and
- d. prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Applied Graphene Materials plc website.

Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.



INDEPENDENT AUDITOR'S REPORT

to the members of Applied Graphene Materials plc

Opinion

We have audited the financial statements of Applied Graphene Materials Plc (the 'parent company') and its subsidiaries (the 'group') for the year ended 31 July 2021 which comprise the consolidated income statement and statement of comprehensive income, the consolidated and company statement of financial position, the consolidated and company statement of changes in shareholders' equity, the consolidated and company cash flow statement and notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and International Accounting Standards in conformity with the requirements of the Companies Act 2006 and, as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006.

In our opinion:

- the financial statements give a true and fair view of the state of the group's and of the parent company's affairs as at 31 July 2021 and of the group's loss for the year then ended;
- the group financial statements have been properly prepared in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006;
- the parent company financial statements have been properly prepared in accordance with International Accounting Standards in conformity with the requirements of the Companies Act 2006 and as applied in accordance with the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Our evaluation of the directors' assessment of the group's and parent company's ability to continue to adopt the going concern basis of accounting included reviewing and evaluating management's latest forecasts and plans, considering the appropriateness and sensitivity of key assumptions and reviewing the cash balances available to the group.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's or the parent company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Summary of our audit approach

Key audit matters	Group None.
	Parent Company Restructure and impairment within the parent company balance sheet.
Materiality	Group <ul style="list-style-type: none"> • Overall materiality: £365,000 (2020: £366,000). • Performance materiality: £274,000 (2020: £274,000).
	Parent Company <ul style="list-style-type: none"> • Overall materiality: £249,000 (2020: £222,000). • Performance materiality: £186,000 (2020: £166,000).
Scope	Our audit procedures covered 100% of revenue, total assets and result before tax.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the group and parent company financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on the overall audit strategy, the allocation of resources in the audit and directing the efforts of the engagement team.

Key audit matters continued

These matters were addressed in the context of our audit of the group and parent company financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Restructure and impairment within the parent company balance sheet

Key audit matter description	<p>During the year ended 31 July 2021, intercompany loans totalling £29,015,000 due from Applied Graphene Materials UK Limited were restructured and capitalised as investments by Applied Graphene Materials Plc. Following the restructure/capitalisation, additional amounts totalling £1,546,000 were advanced/recharged to Applied Graphene Materials UK Limited and were accounted for as capital contributions. An impairment charge totalling £19,943,000 was recognised at 31 July 2021 as disclosed in note 9.</p> <p>As disclosed in the critical accounting estimates and judgments, management estimate is involved in calculating the impairment provision required and management judgment was necessary in determining the accounting treatment relevant to amounts advanced/recharged to Applied Graphene Materials UK since the date of the restructure/capitalisation.</p> <p>Given the estimation inherent in the calculation of the impairment charge and the judgment necessary in determining the accounting treatment for amounts advanced/recharged to Applied Graphene Materials UK Limited this matter is considered one of the most significant risks of material misstatement.</p>
How the matter was addressed in the audit	<p>Our audit work included:</p> <ul style="list-style-type: none"> • Obtaining and reviewing evidence relating to the accounting treatment applied to amounts advanced/recharged since the date of the restructure/capitalisation, including discussions with and challenge of management. • Reviewing management's accounting paper relevant to the accounting treatment applied to amounts advanced/recharged since the date of the restructure/capitalisation. • Obtaining and reviewing the provision calculation and challenging and corroborating the appropriateness of key assumptions. • Testing the mathematical accuracy of the provision calculation and assessing the accuracy of the source data. • Considering the adequacy of disclosures in the notes to the financial statements.

Our application of materiality

When establishing our overall audit strategy, we set certain thresholds which help us to determine the nature, timing and extent of our audit procedures. When evaluating whether the effects of misstatements, both individually and on the financial statements as a whole, could reasonably influence the economic decisions of the users we take into account the qualitative nature and the size of the misstatements. Based on our professional judgment, we determined materiality as follows:

	Group	Parent company
Overall materiality	Overall materiality: £365,000 (2020: £366,000).	Overall materiality: £249,000 (2020: £222,000).
Basis for determining overall materiality	10% of result before tax.	1.5% of net assets. The percentage applied to the benchmark has been restricted for the purpose of calculating an appropriate component materiality.
Rationale for benchmark applied	Result before tax has been selected on the basis that this benchmark is of most relevance to the users of the financial statements because the group is still in its development phase.	Net assets has been selected as the parent company is a holding company and no income statement is presented.
Performance materiality	£274,000 (2020: £274,000)	£186,000 (2020: £166,000)
Basis for determining performance materiality	75% of overall materiality.	75% of overall materiality.
Reporting of misstatements to the Audit Committee	Misstatements in excess of £18,000 and misstatements below that threshold that, in our view, warranted reporting on qualitative grounds.	Misstatements in excess of £12,000 and misstatements below that threshold that, in our view, warranted reporting on qualitative grounds.



INDEPENDENT AUDITOR'S REPORT CONTINUED

to the members of Applied Graphene Materials plc

An overview of the scope of our audit

The group consists of 2 components, all of which are based in the UK. The coverage achieved by our audit procedures was:

	Number of components	Revenue	Total assets	Result before tax
Full scope audit	2	100%	100%	100%
Total	2	100%	100%	100%

Other information

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the group and the parent company and their environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group's and the parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

The extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities are instances of non-compliance with laws and regulations. The objectives of our audit are to obtain sufficient appropriate audit evidence regarding compliance with laws and regulations that have a direct effect on the determination of material amounts and disclosures in the financial statements, to perform audit procedures to help identify instances of non-compliance with other laws and regulations that may have a material effect on the financial statements, and to respond appropriately to identified or suspected non-compliance with laws and regulations identified during the audit.

The extent to which the audit was considered capable of detecting irregularities, including fraud continued

In relation to fraud, the objectives of our audit are to identify and assess the risk of material misstatement of the financial statements due to fraud, to obtain sufficient appropriate audit evidence regarding the assessed risks of material misstatement due to fraud through designing and implementing appropriate responses and to respond appropriately to fraud or suspected fraud identified during the audit.

However, it is the primary responsibility of management, with the oversight of those charged with governance, to ensure that the entity's operations are conducted in accordance with the provisions of laws and regulations and for the prevention and detection of fraud.

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud, the group audit engagement team:

- obtained an understanding of the nature of the industry and sector, including the legal and regulatory framework that the group and parent company operate in and how the group and parent company are complying with the legal and regulatory framework;
- inquired of management, and those charged with governance, about their own identification and assessment of the risks of irregularities, including any known actual, suspected or alleged instances of fraud;
- discussed matters about non-compliance with laws and regulations and how fraud might occur including assessment of how and where the financial statements may be susceptible to fraud.

The most significant laws and regulations were determined as follows:

Legislation/Regulation	Additional audit procedures performed by the Group audit engagement team included:
International accounting standards in conformity with the Companies Act 2006	<ul style="list-style-type: none"> • Review of the financial statement disclosures and testing to supporting documentation • Completion of disclosure checklists to identify areas of non-compliance
Tax compliance regulations	<ul style="list-style-type: none"> • Inspection and review of tax computations prepared by the group's external tax advisors • Inspection and review of R&D tax credit workings prepared in support of the credit and debtor recognised in the financial statements • Input from a tax specialist was obtained regarding the R&D tax credit workings • Consideration of whether any matter identified during the audit required reporting to an appropriate authority outside the entity
Health and safety and environmental regulations	<ul style="list-style-type: none"> • Inquiry of management • Inspection of correspondence with regulators (where applicable)

The areas that we identified as being susceptible to material misstatement due to fraud were:

Risk	Audit procedures performed by the audit engagement team:
Management override of controls	<ul style="list-style-type: none"> • Testing the appropriateness of journal entries and other adjustments; • Assessing whether the judgments made in making accounting estimates are indicative of a potential bias; and • Evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: <http://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Alan Aitchison (Senior Statutory Auditor)

For and on behalf of RSM UK Audit LLP, Statutory Auditors
Chartered Accountants
Central Square
Fifth Floor
29 Wellington Street
Leeds
LS1 4DL
12 October 2021



Financial statements

CONSOLIDATED INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 July 2021

	Note	2021 £'000	2020 £'000
Revenue	1	123	83
Cost of sales		(363)	(215)
Gross loss		(240)	(132)
Operating expenses		(3,319)	(3,566)
EBITDA		(3,150)	(3,084)
Exceptional costs	2	—	(168)
Depreciation of property, plant and equipment	8	(409)	(446)
Operating loss	2	(3,559)	(3,698)
Finance expense	4	(9)	(8)
Finance income	4	3	41
Loss before tax		(3,565)	(3,665)
Tax credit	5	391	476
Loss for the year attributable to equity shareholders		(3,174)	(3,189)
Other comprehensive income		—	—
Total comprehensive expense		(3,174)	(3,189)
Loss per share (pence per share)			
Basic and diluted	6	(5.6)	(6.4)
Adjusted	6	(5.6)	(6.1)

EBITDA comprises earnings before finance income, tax, exceptional costs and depreciation.

CONSOLIDATED AND COMPANY STATEMENT OF FINANCIAL POSITION

as at 31 July 2021

	Note	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Assets					
Non-current assets					
Intangible assets	7	427	—	276	—
Property, plant and equipment	8	1,275	—	1,420	—
Investments	9	—	10,813	—	196
Trade and other receivables	11	—	—	—	6,294
		1,702	10,813	1,696	6,490
Current assets					
Inventories	10	93	—	74	—
Trade and other receivables	11	276	147	281	790
Corporation tax recoverable		413	—	482	—
Cash and cash equivalents		6,308	6,130	3,685	2,948
		7,090	6,277	4,522	3,738
Total assets		8,792	17,090	6,218	10,228
Liabilities					
Non-current liabilities					
Lease liabilities	12	—	—	(4)	—
Current liabilities					
Trade and other payables	12	(1,097)	(362)	(929)	(342)
Total liabilities		(1,097)	(362)	(933)	(342)
Net current assets		5,993	5,915	3,593	3,396
Net assets		7,695	16,728	5,285	9,886
Equity					
Called up share capital	14	1,287	1,287	989	989
Share premium account	15	32,727	32,727	27,473	27,473
Merger reserve	16	1,231	—	1,231	—
Retained earnings		(27,550)	(17,286)	(24,408)	(18,576)
Total equity		7,695	16,728	5,285	9,886

The Parent Company's profit and total comprehensive income for the financial year was £1,357,000 (2020: loss of £5,176,000).

The financial statements on pages 62 to 84 were approved by the Board of Directors on 12 October 2021 and were signed on its behalf by:

Adrian Potts
Chief Executive Officer

David Blain
Chief Financial Officer

Applied Graphene Materials plc

Registered number 08708426



Financial statements

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

for the year ended 31 July 2021

	Called up share capital £'000	Share premium account £'000	Merger reserve £'000	Retained earnings £'000	Total equity £'000
At 1 August 2019	989	27,473	1,231	(21,205)	8,488
Loss for the year and total comprehensive expense	—	—	—	(3,189)	(3,189)
Transactions with owners in their capacity as owners:					
IFRS 2 share based payments	—	—	—	(14)	(14)
At 31 July 2020	989	27,473	1,231	(24,408)	5,285
Loss for the year and total comprehensive expense	—	—	—	(3,174)	(3,174)
Transactions with owners in their capacity as owners:					
Shares issued during the year	298	5,254	—	—	5,552
IFRS 2 share based payments	—	—	—	32	32
At 31 July 2021	1,287	32,727	1,231	(27,550)	7,695

COMPANY STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

for the year ended 31 July 2021

	Called up share capital £'000	Share premium account £'000	Retained earnings £'000	Total equity £'000
At 1 August 2019	989	27,473	(13,386)	15,076
Loss for the year and total comprehensive expense	—	—	(5,176)	(5,176)
Transactions with owners in their capacity as owners:				
IFRS 2 share based payments	—	—	(14)	(14)
At 31 July 2020	989	27,473	(18,576)	9,886
Loss for the year and total comprehensive income	—	—	1,357	1,357
Transactions with owners in their capacity as owners:				
Shares issued during the year	298	5,254	—	5,552
IFRS 2 share based payments	—	—	(67)	(67)
At 31 July 2021	1,287	32,727	(17,286)	16,728

CONSOLIDATED AND COMPANY CASH FLOW STATEMENT

for the year ended 31 July 2021

	Note	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Operating activities					
Net cash used in operations	19	(3,019)	(827)	(3,465)	(184)
Corporation tax received		461	—	1,316	—
Net finance (expense)/income		(6)	3	41	40
Net cash used in operating activities		(2,564)	(824)	(2,108)	(144)
Investing activities					
Loans advanced to subsidiary undertakings		—	—	—	(2,745)
Purchase of intangible assets		(151)	—	(121)	—
Purchase of property, plant and equipment		(67)	—	(221)	—
Net cash used in investing activities		(218)	—	(342)	(2,745)
Financing activities					
Proceeds from the issue of shares (net of expenses)		5,552	5,552	—	—
Capital contributions to subsidiary undertakings		—	(1,546)	—	—
Capital element of lease obligations		(147)	—	—	—
Net cash generated by financing activities		5,405	4,006	—	—
Net increase/(decrease) in net cash and cash equivalents		2,623	3,182	(2,450)	(2,889)
Net cash and cash equivalents at 31 July 2020		3,685	2,948	6,135	5,837
Net cash and cash equivalents at 31 July 2021		6,308	6,130	3,685	2,948
Net cash and cash equivalents include:					
Cash (maturity less than 95 days)		6,308	6,130	3,685	2,948
Net cash and cash equivalents at 31 July 2021		6,308	6,130	3,685	2,948



GROUP AND COMPANY ACCOUNTING POLICIES

General information

The principal activity of Applied Graphene Materials plc (the Company) is that of a holding company for a group of companies which is involved in the manufacture, dispersion and development of applications for graphene. The Company and the Group operate principally in the United Kingdom.

The Company is limited by shares, incorporated and domiciled in the United Kingdom and its registered number is 08708426. The address of the registered office is The Wilton Centre, Redcar, Cleveland TS10 4RF. The Company was incorporated on 27 September 2013.

The Company has elected to take the exemption permitted by Section 408 of the Companies Act 2006 not to present the Parent Company's income statement.

New or amended Accounting Standards and Interpretations adopted

The group and company have adopted all of the new or amended Accounting Standards and Interpretations issued by the International Accounting Standards Board ('IASB') that are mandatory for the current reporting period.

Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

Basis of accounting

The consolidated financial statements of the Group and the financial statements of the Parent Company have been presented under the historical cost accounting convention, with the exception of share based payments at fair value, and in accordance with international accounting standards in conformity with the Companies Act 2006.

The significant accounting policies set out below have, unless otherwise stated, been applied consistently to all years presented in these financial statements.

The financial statements are prepared in Pounds Sterling, which is also the functional currency. Monetary amounts in the financial statements have been rounded to the nearest £'000.

Going concern

After making enquiries and producing cash flow forecasts covering the period to 31 January 2023, the Directors have reasonable expectations, as at the date of approving the financial statements, that the Company and the Group will have adequate resources to fund the activities of the Company and the Group for at least twelve months from the date of the approval of the financial statements. Although the business continued to make losses throughout the year to July 2021, meaningful commercial progress has been made during the year with the development of strong technical data to underpin the product offering, the launch of new eco-friendly graphene dispersions and the new products launched by customers. The increased level of commercial products and engagements provides the Directors with reasonable expectations that the Group continues to demonstrate meaningful progress.

As a group developing new applications for recently discovered materials, the Directors are mindful that there is an ongoing need to monitor overheads and costs associated with delivering the commercialisation programme and raise additional working capital on an ad hoc basis to support the Group's activities. As described on page 80 the Group raised £5.5m of additional funds in February 2021. The Group has no bank facilities and has been meeting its working capital requirements from cash resources.

At 31 July 2021, the Company and the Group had cash reserves of £6.1 million and £6.3 million respectively. The Directors have prepared cash flow forecasts which show that the Group has sufficient cash on hand to satisfy the continued development of the business until at least 31 January 2023 in line with the strategic plan. Furthermore, the Directors have had regard to the consequence of further delays in generating revenue beyond the next twelve months and in this scenario the Directors remain confident that adequate resources will be available.

On the basis of these forecasts prepared covering the period to 31 January 2023 and the resources currently on hand, the Directors have a reasonable expectation that the Company and the Group will have adequate resources to fund the activities of the Company and the Group for at least twelve months from the date of the approval of the financial statements. Therefore, the financial statements have been prepared on a going concern basis.

Basis of consolidation

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the Group takes into consideration potential voting rights. The acquisition date is the date on which control is transferred to the acquirer. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealised income and expenses from intra-group transactions, are eliminated on consolidation.

Foreign currencies

Transactions and balances

Transactions in foreign currencies are recorded at the exchange rates prevailing on the dates of the transactions. Assets and liabilities denominated in foreign currencies are translated into Pounds Sterling at the relevant exchange rates prevailing at the balance sheet date. Exchange gains and losses are taken to the income statement.

Revenue

Revenue is recognised at the fair value of the consideration received or receivable for the sale of goods and services in the ordinary course of business and is shown net of value-added tax. The Group primarily earns revenues from the sale of graphene based products and dispersions. Revenues are recognised following dispatch.

Government grants

Government grants are recognised where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognised as other income on a systematic basis over the time periods that the costs, which it is intended to compensate, are expensed (including any periods of grant monitoring). Where the grant relates to an asset, it is recognised as deferred income and released in equal amounts over the expected useful life of the related asset (after also taking account of any periods of grant monitoring). Owing to the stage of the Group's development as a business primarily engaged in research, management attributes this income to the Group's principal activities and has presented grant income above the gross profit line in the income statement.

Investments

Investments are stated at cost, less any provisions for impairment, which the Directors consider to be a reasonable approximation to fair value.

Intangible assets

Intangible assets are stated at cost less accumulated amortisation and any impairment losses. Intangible assets, which comprise licences and intellectual property, are amortised to the income statement using the straight line method over the shorter of their estimated useful life and period of contractual rights. The estimated useful life and period of contractual rights is expected to be 20 years.

Property, plant and equipment

Property, plant and equipment is stated at cost less accumulated depreciation and any impairment losses. Cost includes the original purchase price of the asset and the costs attributable to bringing the asset to its working condition for its intended use. Depreciation is charged so as to write off the costs of assets over their estimated useful lives, on the following basis:

Plant and machinery	five to ten years straight line
Fixtures and fittings	five years straight line
Computer equipment	three years straight line
Right-of-use assets	over the life of the lease
Construction in progress	not depreciated

The gain or loss arising on the disposal of an asset is determined as the difference between the sales proceeds and the carrying value of the asset and is recognised in the income statement.

Leases

On commencement of a contract which gives the Group the right to use assets for a period of time in exchange for consideration, the Group recognises a right-of-use asset and a lease liability unless the lease qualifies as a "short term" lease (term is twelve months or less with no option to purchase the lease asset) or a "low value" lease (where the underlying asset is £4,000 or less when new).

The lease liability is initially measured at the present value of the lease payments during the lease term discounted using the interest rate implicit in the lease, or the incremental borrowing rate if the interest rate implicit in the lease cannot be readily determined. The lease term is the non-cancellable period of the lease plus extension periods that the Group is reasonably certain to exercise and termination periods that the Group is reasonably certain not to exercise. Lease payments include fixed payments, less any lease incentives receivable, variable lease payments dependent on an index or a rate and any residual value guarantees.

The lease liability is subsequently increased for a constant periodic rate of interest on the remaining balance of the lease liability and reduced for lease payments. Interest on the lease liability is recognised in profit or loss. Variable lease payments are not included in the measurement of the lease liability as they are not dependent on an index or rate and are recognised in profit or loss in the period in which the event or condition that triggers those payments occurs.

Rentals payable under short term or low value operating leases are charged to the income statement on a straight line basis over the term of the relevant lease except where another more systematic basis is more representative of the time pattern in which economic benefits from the lease asset are consumed.



GROUP AND COMPANY ACCOUNTING POLICIES CONTINUED

Impairment of non-current assets

At each reporting date, the Group and Company review the carrying values of their non-current assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable value of the asset is estimated in order to determine the extent of any impairment loss. Where the asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable value is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable value of an asset (or cash-generating unit) is estimated to be less than its carrying value, the carrying value of the asset (or cash-generating unit) is reduced to its recoverable value. Any impairment loss identified is immediately recognised in the income statement.

Inventories

Inventories are recognised at the lower of cost and net realisable value. Cost is determined using the first in, first out method. Appropriate provisions for estimated irrecoverable amounts are recognised in the income statement when there is objective evidence that the assets are impaired.

Financial instruments

The Group and Company classify financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss); and
- those to be measured at amortised cost.

The classification depends on the Group's and Company's business model for managing the financial assets and the contractual terms of the cash flows. All financial instruments are currently measured at amortised cost.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

The Group and Company reclassify debt investments when and only when its business model for managing those assets changes.

Recognition of financial assets and financial liabilities

Financial assets and financial liabilities are recognised on the Group's and Company's balance sheet when they become a party to the contractual provisions of the instrument.

Derecognition of financial assets and financial liabilities

The Group and Company derecognise a financial asset only when the contractual rights to cash flows from the asset expire or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group and Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for the amount it may have to pay. If the Group and Company retain substantially all the risks and rewards of ownership of a transferred financial asset, the Group and Company continue to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

The Group derecognises financial liabilities when the Group's and Company's obligations are discharged or cancelled or have expired.

Measurement

At initial recognition, the Group and Company measure a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Subsequent measurement of debt instruments depends on the Group's and Company's business model for managing the asset and the cash flow characteristics of the asset. Assets that are held for collection of contractual cash flows, where those cash flows represent solely payments of principal and interest, are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented as a separate line item in the statement of profit or loss.

Impairment

The Group and Company assess, on a forward-looking basis, the expected credit losses associated with its debt instruments. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, the Group and Company apply the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

Financial instruments continued

Trade receivables

Trade receivables are initially recognised at the amount of consideration that is unconditional, unless they contain significant financing components, when they are recognised at fair value and are subsequently measured at amortised cost less provision for impairment.

Intra-group receivables

Intra-group receivables are recognised initially at fair value and subsequently measured at amortised cost less provision for impairment. Appropriate provisions for estimated irrecoverable amounts are recognised in the income statement when there is objective evidence that the assets are impaired.

Cash

Cash comprises cash on hand, demand deposits and other short term, highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. Cash has a maturity period of 95 days or less which is used to meet working capital requirements. The Directors therefore judge it appropriate to treat these as cash.

Trade and other payables

Trade and other payables are initially measured at their fair value and are subsequently measured at their amortised cost using the effective interest rate method. This method allocates interest expense over the relevant period by applying the “effective interest rate” to the carrying amount of the liability.

Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Share based payments

The Group issues share options to certain employees which are measured at fair value and are recognised as an expense in the income statement with a corresponding increase in retained earnings. The fair value of the employee services received in exchange for the grant of the options is recognised as an expense. The total amount to be expensed over the vesting period is determined by reference to the fair value of the options granted. The options are equity settled.

The fair value of these grants is measured at the date of each grant using an appropriate option pricing model and is recognised over the period during which employees become unconditionally entitled to the awards. At each balance sheet date, the Group revises its estimates of the number of options that are expected to vest. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to retained earnings.

Where share options are awarded to certain employees of subsidiary companies, the expense associated with those share options is recognised as an increase in investments in subsidiaries. Where the Parent Company recharges the share based payment expense, this is reflected as a reduction in the value of investments in subsidiaries as the recharges arise.

Employee benefits

The Group and Company operate a defined contribution pension scheme. Contributions to the defined contribution pension scheme are charged to the income statement in the financial year to which the contributions relate. The contributions paid by the Group, Company and the employees are invested within the individual pension funds in the month following the month of deduction.

Exceptional costs

Items that are both material and non-recurring and whose significance is sufficient to warrant separate disclosure and identification within the consolidated financial statements are referred to as exceptional costs. Such items are disclosed separately within the financial statements.

Research and development

In accordance with IAS 38, it is the Group’s policy to recognise an intangible asset for development of its product once the criteria have been met. Otherwise all costs in the research phase will be recognised in the Group statement of comprehensive income for the period in which they are incurred. Costs that are directly attributable to the development phase of a product are recognised as intangible assets, provided they meet the following recognition requirements:

- completion of the intangible asset is technically feasible so that it will be available for use or sale;
- the Group intends to complete the intangible asset and use or sell it;
- the Group has the ability to use or sell the intangible asset;
- the intangible asset will generate probable future economic benefits. Among other things, this requires that there is a market for the output from the intangible asset or for the intangible asset itself, or, if it is to be used internally, the asset will be used in generating such benefits;
- there are adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the expenditure attributable to the intangible asset during its development can be measured reliably.



GROUP AND COMPANY ACCOUNTING POLICIES CONTINUED

Research and development continued

Development costs not meeting these criteria for capitalisation are expensed as incurred. No development costs have been capitalised to date as the criteria for recognition have not been met.

Current and deferred tax

The tax expense or credit represents the sum of the tax currently payable or receivable together with the movement in deferred tax.

The tax currently receivable is based on the taxable loss for the year and includes the benefit of research and development tax credits. Taxable loss differs from the loss before tax as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items of income or expense that are never taxable or deductible. The Group's receivable for current tax is calculated using tax rates that have been enacted or substantively enacted as at the balance sheet date.

Research and development tax credits for the year are calculated after having taken into account the level of research and development work carried out during the year.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying value of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognised for all temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated with reference to rates that are substantively enacted at the balance sheet date and expected to apply in the year when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited directly to equity, in which case the related deferred tax is also dealt with as an addition or reduction in equity.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Critical accounting estimates and judgments

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's and Company's accounting policies.

Estimates are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The Group and Company make estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results.

The significant judgments and estimates set out below have, unless otherwise stated, been applied consistently to all years presented in these financial statements.

Judgments involving estimation – Group

Research and development tax credits

Research and development tax credits for the year ended 31 July 2021 totalling £412,000 (2020: £476,000) have been calculated using estimates consistent with the prior year detailed computation submitted to and approved by HMRC. Estimation is applied in assessing the amount of time and resource allocated to R&D programmes and is used in concluding upon the extent to which the Group's activity will qualify for the enhanced relief. Further disclosures relating to research and development tax credits are included in note 5 to the financial statements.

Impairment of non-current assets

At each reporting date the Directors review the carrying values of the Group's non-current assets to determine whether there is any indication that those assets have suffered an impairment loss. Having completed this review the Directors have concluded that there is no impairment charge during the year (2020: £nil).

In drawing their conclusions on this matter, the Directors have considered the market capitalisation of the Group at 31 July 2021 and note that Group net assets of £7.7 million are substantially below market capitalisation of £16.7 million. On the assumption that market capitalisation is a reliable proxy for fair value, this suggests that there is no impairment within the Group balance sheet. The carrying value of non-current assets totalled £1.7 million (2020: £1.9 million) and is disclosed in notes 7 and 8 to the financial statements.

Judgments involving estimation – Group continued

Deferred tax assets

Deferred tax assets and liabilities require management judgment in determining the amounts to be recognised. In particular, judgment is used when assessing the extent to which deferred tax assets should be recognised with consideration given to the timing and level of future taxable income.

In previous years the Group has not recognised a deferred tax asset in relation to the Group's cumulative tax losses. Having given due consideration to whether it is pertinent to recognise a deferred tax asset the Board, following preparation of detailed short to medium term profit and loss account forecasts, has determined that there has been no substantive change in circumstances and as such has concluded that it is not appropriate to recognise a deferred tax asset at this time. The unprovided asset of £4,463,000 (2020: £3,001,000), as included in note 5 to the financial statements, will only be recognised once it is probable that future taxable profits will be available against which the asset can be utilised.

Capitalisation of development costs

The Group's accounting policy in respect of development costs is set out above. The Directors have exercised their judgment in assessing whether costs incurred during the year meet the conditions set out in IAS 38. Having carefully considered the expenditure in the year and the current state of development of the business, the Directors have concluded that no such costs should be capitalised as there is currently insufficient evidence that any asset will probably generate future economic benefits. This judgment will be reviewed on an ongoing basis.

Research and development costs totalling £1,324,000 (2020: £1,465,000) have been expensed during the year, as disclosed in note 2 to the financial statements.

Judgments involving estimation – Company only

Recoverability of intercompany receivables

Amounts owed by subsidiary undertakings represent cash advances and recharges made to the Company's main subsidiary undertaking. The gross amount due to the Company at 31 July 2021 is £nil (2020: £28.5 million). During the year intercompany loans of £29.0 million were converted into an investment in the subsidiary company and impairment provisions totalling £22.0 million were released. Capital contributions to the subsidiary since the capitalisation of the loan of £1.5 million at 31 July 2021 have been added to the cost of investment in the subsidiary.

The carrying value of amounts owed by subsidiary undertakings at 31 July 2021 was £nil (2020: £7.0 million) and is disclosed in note 11 to the financial statements.

The capital contributions made in the year ended 31 July 2021 fall outside the scope of IFRS 9 Financial Instruments. In the prior year, as the subsidiary undertaking could not repay the loan at the reporting date, the Company made an assessment of expected credit losses. Having considered multiple scenarios on the manner, timing, quantum and probability of recovery on the receivables, a lifetime expected credit loss (ECL) of £nil (2020: £11.2 million) has been provided.

The calculation of the allowance for lifetime expected credit losses requires a significant degree of estimation and judgment, in particular determining the probability weighted likely outcome for each scenario considered. The Directors' assessment of ECL included repayment through future cash flows over time (which are inherently difficult to forecast for the Company at its current stage of development) and also the amount that could be realised through an immediate sale of the subsidiary undertaking. The Directors' assessment of repayment through future cash flows included a scenario where the loan was not recovered in full.

Impairment of Parent Company net assets

Following the reversal of provisions of £22.0 million against the loan balances that have now been capitalised, the Company's net assets totalled £36.7 million (2020: £14.7 million). This was above the market capitalisation of the Group at 31 July 2021 of £16.7 million (2020: £9.9 million). In accordance with IAS 36, the Directors have considered whether this situation is an indicator of impairment and concluded that an impairment review should be performed at 31 July 2021.

In light of the development of the Group in the period, and the delays encountered in respect of making substantive commercial progress with regard to revenue generation, the Directors concluded that the value in use calculated in accordance with IAS 36 was lower than fair value. This conclusion was in part due to much of the anticipated revenue growth for the Group being in the longer term and the restrictive nature of long term growth assumptions permitted by IAS 36. Accordingly, the Directors have recorded an IAS 36 impairment provision against the Company balance sheet (as part of investments in subsidiary undertakings) reducing the net assets to the market capitalisation at that date of £16.7 million (2020: £9.9 million). The key judgment made by the Directors in this regard relates to the use of market capitalisation as a measure of fair value.



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 Segmental information

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the Chief Operating Decision Maker (CODM) in deciding how to allocate resources and in assessing performance. The Group's Chief Executive Officer has been identified as the CODM. The Group has one operating segment: the manufacture, dispersion and development of applications for graphene. Revenue and profits arising from that operating segment are the same as presented on the face of the consolidated income statement and statement of comprehensive income. As the business evolves this is an area that will be assessed on a regular basis and additional segmental reporting will be provided at the appropriate time.

Revenue

During the year ended 31 July 2021, there were three (2020: two) significant customers which generated revenue of £12,000, £32,000 and £18,000 (2020: £22,000 and £9,000).

The Group's revenue by geographic location based on the customer's location is as follows:

	2021 £'000	2020 £'000
UK	82	50
Europe	8	14
Rest of World	33	19
	123	83

2 Operating loss

	2021 £'000	2020 £'000
Operating loss is stated after charging:		
Wages, salaries, social security, pension costs and IFRS 2 share based payments	2,077	2,198
Research and development expense*	1,324	1,465
Depreciation of property, plant and equipment	409	446

* Included within research and development expense are staff costs totalling £1,076,000 (2020: £1,219,000) which are also included as part of wages and salaries included above and in note 3.

The operating loss is stated after charging exceptional costs of £nil (2020: £168,000) relating to redundancy costs arising from the realignment of the Group's activities and a reduction in costs.

Services provided by the Group's auditors

During the year the Group obtained the following services from its auditors at costs as detailed below:

	2021 £'000	2020 £'000
Audit services		
Fees payable to the Company's auditors for the audit of the Company and consolidated financial statements	24	23
Fees payable to the Company's auditors for the audit of the Company's subsidiaries pursuant to legislation	12	12
	36	35

3 Directors and employees

The aggregate payroll costs of employees, including Directors, were:

	2021 £'000	2020 £'000
Wages and salaries	1,780	1,843
Social security costs	160	236
Other pension costs	105	133
IFRS 2 share based payments	32	(14)
	2,077	2,198

Six (2020: six) Directors of the Group are employed by the Company, and the Company includes no other employees. The remuneration of each individual (which forms part of these financial statements) is set out in the Remuneration report on page 53.

At 31 July 2021 outstanding pension contributions totalling £15,000 (2020: £4,000) are included in other creditors.

The average number of persons employed by the Group during the year was:

	2021 £'000	2020 £'000
Group		
Engineering, technical and production	19	20
Other	6	7
Directors	5	6
Average monthly number of employees	30	33

4 Net finance expense

	2021 £'000	2020 £'000
Interest receivable on bank deposits	3	41
Interest on lease liabilities	(9)	(8)
Net finance (expense)/income	(6)	33

5 Tax on loss

	2021 £'000	2020 £'000
Current tax		
Corporation tax:		
Current year	(413)	(476)
Adjustments in respect of prior years	22	—
Total current tax	(391)	(476)
Deferred tax		
UK deferred tax	—	—
Adjustments in respect of prior years	—	—
Total deferred tax	—	—
	(391)	(476)



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

5 Tax on loss continued

The tax assessed for the year is higher (2020: higher) than the UK corporation tax rate of 19% (2020: 19%). The tax on the Group's loss before tax differs from the theoretical amount that would arise using the weighted average tax rate as follows:

	2021 £'000	2020 £'000
Loss before tax	(3,565)	(3,665)
Tax at the UK corporation tax rate	(677)	(696)
Adjustments in respect of prior periods	22	—
Expenses not deductible for tax purposes	41	289
Income not taxable	(6)	(19)
R&D expenditure	244	351
Movements on unrecognised deferred tax balances	398	75
R&D tax credit provision in respect of prior year	—	—
R&D tax credit provision in respect of current year	(413)	(476)
Other timing differences	—	—
Tax credit for the year	(391)	(476)

Other timing differences relate to permanent and temporary timing differences which are not allowable for taxation purposes.

Deferred tax assets totalling approximately £4,463,000 (2020: £3,001,000) have not been recognised.

6 Earnings per share

Basic earnings per share is calculated by dividing the earnings attributable to Ordinary shareholders by the weighted average number of shares in issue during each year. The weighted average number of shares in issue during the year used in the calculation of basic earnings per share was as follows:

	2021 million	2020 million
Weighted average number of shares for basic earnings per share	56.4	49.4

Diluted earnings per share is the basic earnings per share adjusted for the effect of the conversion into fully paid shares of the weighted average number of share options outstanding during the year. The Group was loss making for the years ended 31 July 2020 and 31 July 2021; therefore, the dilutive effect of share options has not been disclosed since this would decrease the loss per share for each of the years reported.

Adjusted earnings per share has been calculated so as to exclude the effect of exceptional costs including related tax charges and credits. Adjusted earnings used in the calculation of basic and diluted earnings per share reconciles to basic earnings as follows:

	2021 £'000	2020 £'000
Basic earnings	(3,174)	(3,189)
Exceptional costs	—	168
Adjusted earnings	(3,174)	(3,021)
Loss per share (pence per share)		
Basic and diluted	(5.6)	(6.4)
Adjusted loss per share (pence per share)		
Basic	(5.6)	(6.1)

7 Intangible assets

Group	Intellectual property £'000	Total £'000
Cost		
At 1 August 2019	155	155
Additions	121	121
At 31 July 2020	276	276
Additions	151	151
At 31 July 2021	427	427
Accumulated amortisation		
At 1 August 2019	—	—
Charge for the year	—	—
At 31 July 2020	—	—
Charge for the year	—	—
At 31 July 2021	—	—
Net book value		
At 31 July 2021	427	427
At 31 July 2020	276	276

The intellectual property is in relation to patent costs. These patents have not yet been granted; therefore, no amortisation has been charged in relation to these for the year. The intellectual property has been reviewed for impairment and no impairment provision is required as all pending patents remain of use to the Group.

The Company had no intangible assets in the year ended 31 July 2020 and the year ended 31 July 2021.



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

8 Property, plant and equipment

Group	Fixtures and fittings £'000	Plant and machinery £'000	Computer equipment £'000	Right-of-use assets £'000	Construction in progress £'000	Total £'000
Cost						
At 1 August 2019	77	2,744	45	—	—	2,866
Right-of-use assets on transition to IFRS 16	—	—	—	174	—	174
Additions	—	34	13	—	—	47
Disposals	—	(2)	(1)	—	—	(3)
At 31 July 2020	77	2,776	57	174	—	3,084
Additions	3	14	10	197	40	264
Disposals	—	—	—	(174)	—	(174)
At 31 July 2021	80	2,790	67	197	40	3,174
Accumulated depreciation						
At 1 August 2019	(43)	(1,136)	(42)	—	—	(1,221)
Charge for the year	(11)	(282)	(3)	(150)	—	(446)
Disposals	—	2	1	—	—	3
At 31 July 2020	(54)	(1,416)	(44)	(150)	—	(1,664)
Charge for the year	(9)	(244)	(8)	(148)	—	(409)
Disposals	—	—	—	174	—	174
At 31 July 2021	(63)	(1,660)	(52)	(124)	—	(1,899)
Net book value						
At 31 July 2021	17	1,130	15	73	40	1,275
At 31 July 2020	23	1,360	13	24	—	1,420

The carrying amount and depreciation of right-of-use assets all relate to property leases. At 31 July 2021 the Group had capital commitments of £42,000 (2020: £nil).

The Company had no property, plant and equipment in the year ended 31 July 2020 and the year ended 31 July 2021.

9 Investments

Company	Investment in subsidiaries £'000
Cost	
At 1 August 2019	196
IFRS 2 share based payments relating to subsidiary undertakings	(98)
IFRS 2 share based payments recharged to subsidiary undertakings	98
At 31 July 2020	196
Additions to investment in Applied Graphene Materials UK Limited	30,560
IFRS 2 share based payments relating to subsidiary undertakings	(33)
IFRS 2 share based payments recharged to subsidiary undertakings	33
At 31 July 2021	30,576
Provision for impairment	
At 1 August 2019 and 31 July 2020	—
Charge for the year	(19,943)
At 31 July 2021	(19,943)
Net book value	
At 31 July 2021	10,813
At 31 July 2020	196

At 31 July 2020, the amounts owed by subsidiary undertakings included a loan to Applied Graphene Materials UK Limited for gross amount of £28,332,000. This loan and other intercompany balances of £682,000 were capitalised as investments in the subsidiary during October 2020 and impairments of £11,175,000 under IFRS 9 and £10,863,000 under IAS 36 were reversed. During the year a further £1,546,000 of capital contributions have been made by the Company in Applied Graphene Materials UK Limited and have been recognised as additions to investments. At 31 July 2021 a provision for impairment of investments of £19,943,000 was recognised as a result of an impairment review.

At 31 July 2021 the Company held more than 20% of the allotted share capital of the following subsidiary undertakings:

	Country of incorporation	Class of share capital	Proportion held by Parent Company	Principal activities
Applied Graphene Materials UK Limited, Office 2, Innovation Centre, Wilton Site, Redcar, Cleveland TS10 4RF	England	Ordinary	100%	Research, development and manufacture of graphene
Applied Graphene Ventures Limited, The Wilton Centre, Wilton, Redcar, Cleveland TS10 4RF	England	Ordinary	100%	Dormant
Applied Graphene Ventures LLC, The Wilton Centre, Wilton, Redcar, Cleveland TS10 4RF	USA	Ordinary	100%	Dormant

10 Inventories

Group	2021 £'000	2020 £'000
Finished goods	47	36
Spares	46	38
	93	74

The Directors believe that the carrying value of inventories is exceeded by their net realisable value and so no impairment has been recognised (2020: £nil). The amount of inventories recognised in cost of sales during the year was £43,000 (2020: £6,500).

The Company had no inventories in the year ended 31 July 2020 and the year ended 31 July 2021.



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

11 Trade and other receivables

	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Amounts owed by subsidiary undertakings	—	—	—	6,977
Trade receivables	13	—	16	—
Other receivables	25	8	64	47
Prepayments and accrued income	238	139	201	60
	276	147	281	7,084
Non-current	—	—	—	6,294
Current	276	147	281	790
	276	147	281	7,084

Contractual payment terms with the Group's customers are typically 30 days. There are no provisions for impairment losses in respect of trade and other receivables.

The Directors believe that the carrying value of trade and other receivables represents their fair value. In determining the recoverability of trade receivables the Group considers any change in the credit quality of the receivable from the date credit was granted up to the reporting date. For details on the Group's credit risk management policies, refer to note 13. The carrying amounts of the Group's receivables are all denominated in Pounds Sterling.

No class of trade and other receivables contains assets which are considered to be impaired. The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivable mentioned above. The Group does not hold any collateral as security.

At 31 July 2020, the amounts owed by subsidiary undertakings included a loan to Applied Graphene Materials UK Limited for a gross amount of £28,332,000. This loan and other intercompany balances of £682,000 were capitalised as investments in the subsidiary during October 2020 and impairments of £11,175,000 under IFRS 9 and £10,863,000 under IAS 36 were reversed. During the year a further £1,546,000 of capital contributions have been made by the Company in Applied Graphene Materials UK Limited and have been recognised as additions to investments.

12 Trade and other payables

	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Current liabilities				
Trade payables	376	150	202	56
Other tax and social security	52	18	37	17
Accruals and deferred income	578	194	664	269
Lease liabilities	74	—	21	—
Other creditors	17	—	5	—
	1,097	362	929	342
Non-current liabilities				
Lease liabilities	—	—	4	—
	—	—	4	—

Trade and other payables principally comprise amounts outstanding for trade purchases and other costs. They are non-interest bearing and are normally settled on 30 to 45 day terms (2020: 30 to 45 days).

The Directors consider that the carrying value of trade and other payables approximates to their fair value due to their short term nature. All trade and other payables are denominated in Pounds Sterling.

The Group has financial risk management policies in place to ensure that all payables are paid within the credit terms and no interest has been charged by any suppliers as a result of late payment of invoices during the year.

Non-current lease liabilities at 31 July 2020 relate to land and buildings leases which expire in one to five years.

13 Financial instruments

The Group and Company are exposed to the risks that arise from their use of financial instruments. This note describes the objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements.

Capital risk management

The Group and Company manage their capital to ensure that it will be able to continue as a going concern while maximising the return to stakeholders. The Group and Company are funded principally by equity. The capital structure of the Group consists of equity, comprising issued share capital. The Group and Company have no externally imposed capital requirements.

In order to maintain or adjust the capital structure, the Group and Company may return capital to shareholders or issue new shares.

Principal financial instruments

The principal financial instruments used by the Group and Company are as follows:

- trade and other receivables;
- trade and other payables;
- cash; and
- cash deposits.

Financial assets

At the reporting date, the Group and Company held the following financial assets which represent the maximum exposure to risk:

	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Cash	6,308	6,130	3,685	2,948
Trade receivables	13	—	16	—
Amounts owed by subsidiary	—	—	—	6,977
Other receivables	25	8	64	47
	6,346	6,138	3,765	9,972

Financial liabilities

At the reporting date, the Group and Company held the following financial liabilities, all of which were classified as other financial liabilities:

	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Trade payables	376	150	202	56
Other payables	669	194	694	269
	1,045	344	896	325

Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group or Company. Credit risk arises principally from the cash balances and trade and other receivables. The concentration of the credit risk is considered by counterparty, geography and currency.

The Group and Company give careful consideration to which organisation it uses for its banking services in order to minimise credit risk. The Group and Company have significant concentrations of cash, which have been placed on deposit with four institutions, each of which has a minimum credit rating of A (long term, as assessed by Standard & Poor's). At the year end, the cash and cash deposits at each reporting date were denominated in the following currencies:

	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Pound Sterling	6,262	6,130	3,645	2,948
US Dollar	24	—	29	—
Euro	22	—	11	—
	6,308	6,130	3,685	2,948



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

13 Financial instruments continued**Credit risk** continued

The nature of the Group's business and the current stage of its development are such that individual customers can comprise a significant proportion of its trade and other receivables at any point in time. The Group mitigates the associated risk by close monitoring of the receivables.

At 31 July 2021, the Group's trade receivables balance was £13,000 (2020: £16,000). The carrying amount of financial assets recognised at the year end represents the maximum exposure to credit risk without taking account of the value of any collateral obtained. In the Directors' opinion, there has been no material impairment of any financial assets at any point during the year.

No collateral is held by the Group or Company as security in relation to its financial assets.

Liquidity risk management

Liquidity risk is the risk that the Group or Company will encounter difficulty in meeting its financial obligations as they fall due. Ultimate responsibility for liquidity risk management rests with the Directors. The Directors manage liquidity risk by regularly reviewing cash requirements by reference to short term cash flow forecasts and medium term working capital projections.

At 31 July 2021, the Group and Company had £6,308,000 (2020: £3,685,000) and £6,130,000 (2020: £2,948,000) respectively of cash and cash deposit reserves.

Market risk

The Group's and Company's activities expose them primarily to the financial risks of changes in foreign currency exchange rates and interest rates. During the year, both these risks were considered to have been minimal.

Foreign currency risk management

The Group's and Company's exposure to foreign currency risk is limited since the vast majority of its invoicing and the majority of its payments are in Pounds Sterling. There are minimal balances held in foreign currencies at each reporting date and the Group and Company have made no significant payments in foreign currencies other than US Dollar and Euro. Accordingly, no sensitivity analysis has been presented as this is immaterial. As a result of the low level of perceived risk, the Group and Company do not use, or plan to use, any instruments to mitigate foreign exchange risk.

Interest rate risk management

Exposure to interest rate risk is limited since the Group and Company have no debt, and there is little movement on deposit interest rates. Accordingly, no sensitivity analysis has been presented since this is immaterial. As a result of the low level of perceived risk, the Group and Company do not use, or plan to use, any instruments to mitigate interest rate risk.

Maturity of financial assets and liabilities

£1,045,000 (2020: £892,000) and £344,000 (2020: £325,000) of the Group's and Company's non-derivative financial liabilities are payable within one year. £nil (2020: £4,000) and £nil (2020: £nil) of the Group's and Company's non-derivative financial liabilities are payable after more than one year. All of the Group and Company's non-derivative financial assets at each reporting date are receivable within one year.

14 Called up share capital

	Number of Ordinary shares	Total £'000
Allotted, called up and fully paid		
At 1 August 2019 and at 31 July 2020 – Ordinary shares of 2 pence each	49,429,380	989
New shares issued during the year	14,909,058	298
At 31 July 2021 – Ordinary shares of 2 pence each	64,338,438	1,287

On 3 September 2020, 215,616 Ordinary shares of 2 pence each were issued to satisfy the exercise of share options. The exercise price of the options was 33 pence.

On 23 October 2021, 59,296 Ordinary shares of 2 pence each were issued to satisfy 50% of the bonus earned by David Blain for the year ended 31 July 2020.

During February 2021, the Company completed a fundraise by issuing 14,634,146 Ordinary shares of 2 pence each at a price of 41 pence, thereby raising £5,552,000 net of costs.

15 Share premium account

	£'000
At 1 August 2019 and at 31 July 2020	27,473
Arising on new shares issued during the year	5,254
At 31 July 2021	32,727

The share premium account comprises the excess value recognised from the issue of Ordinary shares for consideration above par value. The cost incurred in issuing the new shares during the year was £448,000.

16 Merger reserve

	£'000
At 1 August 2019 and at 31 July 2020	1,231
At 31 July 2021	1,231

The merger reserve is a non-distributable reserve that arose through the application of merger relief to the shares issued in 2013 in connection with the acquisition of Applied Graphene Materials UK Limited.

Retained earnings represent cumulative profit and loss net of distributions to owners.

17 Share based payments

The Group operates a number of employee share option schemes, which run over a number of different time periods to reflect when awards have been made to Directors and employees. These schemes include:

- SAYE;
- non-approved executive options; and
- EMI.

The Group's SAYE scheme is open to UK employees of the Group and is not subject to any performance conditions. SAYE takes the form of a monthly savings contract over a three year term, at the end of which participants have the opportunity to acquire shares in the Company at the option price determined at the date of grant.

During the year, the Group has recorded an IFRS 2 charge of £32,000 (2020: credit of £14,000). The majority of the current year charge is derived from three awards made. The fair value of options and significant assumptions used in the calculation of the Group's IFRS 2 charge were as follows:

Grant date	7 May 2020	31 January 2019	31 January 2018
Scheme	EMI/non-approved	EMI/non-approved	EMI/non-approved
Share price at date of grant (£)	£0.095	£0.32	£0.38
Exercise price (£)	£nil	£nil	£nil
Number of participants	20	3	9
Shares under option	1,154,672	901,164	883,810
Vesting period (years)	3	2.8	2.4
Expected volatility (%)	56%	56%	56%
Option life (years)	10	10	10
Expected life (years)	3	3	3
Risk free rate (%)	0.77%	0.77%	0.71%
Expected dividend yield (%)	Nil	Nil	Nil
Fair value per option (£)	£0.095	£0.20	£0.23
Valuation model	Black-Scholes	Monte-Carlo	Monte-Carlo

The expected volatility is based on the historical observed volatility from trading in the Company's shares, over a historical period of time between the date of the grant and the date of exercise. The expected life is the average expected period to exercise. The risk free rate of return is the implied yield on zero coupon UK Government bonds as at each grant date, with a maturity equal to the expected life of the option. Certain awards will only vest in full if specific performance criteria set out in the Remuneration report are met. For non-market based performance criteria, the Directors have made their best estimate of the number of options that will ultimately vest.



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

17 Share based payments continued

A reconciliation of option movements during the year ended 31 July 2021 is shown below:

	2021		2020	
	Number	Weighted average exercise price £	Number	Weighted average exercise price £
At 1 August 2020	3,993,745	0.13	4,022,910	0.14
Granted	—	nil	1,154,672	nil
Forfeited and lapsed	(439,052)	nil	(1,183,837)	0.02
Exercised	(215,616)	0.33	—	nil
Outstanding at 31 July 2021	3,339,077	0.13	3,993,745	0.13
Exercisable at 31 July 2021	719,346	0.42	934,962	0.39

The weighted average exercise price of options granted in the year was £nil (2020: £nil). 215,616 options were exercised (2020: none) and no options were cancelled (2020: none) during the year.

Options are exercisable at prices ranging between £nil and £1.55. The contractual life of options is generally ten years, which includes a vesting period with performance conditions (other than for the Group's SAYE scheme, where no performance conditions exist). The performance criterion for the grant on 7 May 2020 to all employees (except senior management) is continuing to be in employment with the Group at 7 May 2023 or the release of the interim results for the period to 31 January 2023 if later.

18 Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

Transactions with shareholders

The following purchases with shareholders of the Group were recorded, excluding VAT, during the year:

	2021 £'000	2020 £'000
Durham University (shareholder)		
Staff secondment, consultancy and other fees	—	4
Top Technology Limited (controlled by shareholder)		
Non-Executive Director fees	10	15
Conference attendance fees	—	8
IP2IPO (shareholder)		
Non-Executive Director expenses	—	1

The following balances were owed by the Group at the end of the year in respect of the transactions set out above:

	2021 £'000	2020 £'000
Durham University	—	—
Top Technology Limited	—	8

18 Related party transactions *continued*

Remuneration of key management personnel

The remuneration of the Directors and the key management personnel of the Group is set out below in aggregate for each of the categories specified in IAS 24 Related Party Disclosures:

	2021 £'000	2020 £'000
Short term employee benefits (excluding bonuses)	741	772
Bonuses	126	164
National Insurance contributions	122	112
Pension contributions	51	63
Payments to third parties	10	15
IFRS 2 share based payments	32	(14)
	1,082	1,112

Remuneration of key management includes remuneration paid by subsidiary undertakings in the current and prior financial years.

19 Cash flow statement

Net cash generated from operations

	Group 2021 £'000	Company 2021 £'000	Group 2020 £'000	Company 2020 £'000
Continuing operations				
(Loss)/profit for the year attributable to equity shareholders	(3,174)	1,357	(3,189)	(5,275)
Tax credit	(391)	—	(476)	—
Net finance expense/(income)	6	(3)	(33)	(32)
Depreciation of property, plant and equipment	409	—	446	—
Exceptional costs	—	—	168	—
EBITDA	(3,150)	1,354	(3,084)	(5,307)
Depreciation of property, plant and equipment	(409)	—	(446)	—
Exceptional costs	—	—	(168)	—
Operating loss	(3,559)	1,354	(3,698)	(5,307)
Depreciation of property, plant and equipment	409	—	446	—
Disposal of property, plant and equipment	—	—	—	—
IFRS 2 share based payments	32	65	(14)	85
Impairment of intercompany loan/investment	—	(2,094)	—	4,783
Increase in inventories	(19)	—	(22)	—
(Increase)/decrease in receivables	(29)	(73)	(117)	154
Increase/(decrease) in payables	147	(79)	(60)	101
Net cash used in operations	(3,019)	(827)	(3,465)	(184)



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS CONTINUED

20 Net cash/(debt) reconciliation

Group	Cash £'000	Leases £'000	Total £'000
Net cash/(debt)			
At 1 August 2019	6,135	—	6,135
Transition to IFRS 16	—	(174)	(174)
Cash flows	(2,450)	149	(2,301)
New leases	—	—	—
Net cash/(debt) at 31 July 2020	3,685	(25)	3,660
Cash flows	2,623	147	3,770
New leases	—	(196)	(196)
Net cash/(debt) at 31 July 2021	6,308	(74)	6,234

21 Availability of Annual Report

Copies of the Annual Report and Financial Statements and Notice of Annual General Meeting will be posted to the Group's shareholders on 28 October 2021 and will be made available, along with this announcement, to view from that date on the Group's website at www.appliedgraphenematerials.com. Copies may be obtained from the Company Secretary at the registered office of the Company.

The 2021 Annual General Meeting is to be held at 11am on Tuesday 7 December 2021 at The Wilton Centre, Wilton, Redcar Cleveland, TS10 4RF.

All shareholders are strongly encouraged to submit their votes on the formal business to be transacted using the proxy form enclosed with the Notice of AGM.

The Chairman of the AGM will propose that each resolution, as set out in the Notice of AGM, is voted on via a poll. This means that each shareholder present in person (which shall only be such number of Directors as is sufficient to ensure that the AGM is quorate) or by proxy will have one vote for each share held.

The Company will continue to monitor developments relating to COVID-19. If a situation should arise which necessitates that the arrangements for the AGM be altered, shareholders will be notified promptly via an RNS announcement and the Company's website.

As a result of the ongoing COVID-19 pandemic, the Board of the Company would ask that you do not attend the Meeting in person if you have symptoms that may be caused by COVID-19; if you are waiting for the results of a COVID-19 test; if you have received a positive COVID-19 test result; or if you live with someone with COVID-19 symptoms, or with someone who has tested positive for COVID-19.

CORPORATE INFORMATION

Directors

Dr Bryan Dobson
Non-Executive Chairman

Dr Adrian Potts
Chief Executive Officer

David Blain
Chief Financial Officer and Company Secretary

Professor Karl Coleman
Chief Scientific Officer

Sean Christie
Non-Executive Director

Company number
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Applied Graphene Materials' commitment to environmental issues is reflected in this Annual Report, which has been printed on Novatech Digital Silk, an FSC® certified material. This document was printed by Pureprint Group using its environmental print technology, with 99% of dry waste diverted from landfill, minimising the impact of printing on the environment. The printer is a CarbonNeutral® company.

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